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ABSTRACT

The 5th edition of the Environmental Scan is presented by the Association of Colleges of Applied Arts and Technology of Ontario (ACAATO). This planning document builds on the feedback received from college stakeholders regarding its value and usefulness in supporting the colleges' strategic planning processes. The Scan's primary objective is to lessen the randomness of information used in decision-making, and to alert managers and decision makers to trends and issues that may affect organization. Environmental scanning assists educational institutions in understanding the changing needs of learners and in shaping how they market their programs and services to meet those needs. In order to focus this scanning, the environment is organized along three levels: (1) the macro environment, which examines the social, technological, economic, environmental and political sectors; (2) the industry environment, which focuses on those factors and forces influencing a specific sector, such as government student assistance programs; and (3) the task environment, which concentrates on those areas specific to an institution. The nine sections of this document, each of which presents Key Findings and relevant tables, are divided as follows: (1) Economy and the Labor Force; (2) Education and Training; (3) Funding and Income; (4) Information Technology; (5) Ontario Population; (6) Public Policy; (7) Operating Expenses; (8) Learners; and (9) Human Resources. (36 references) (AS)

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ED 460 719

1998-99

ENVIRONMENTAL SCAN

Association of Colleges of Applied Arts and Technology of Ontario

Association des collèges d'arts appliqués et de technologie de l'Ontario

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Next Page

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The 1998-99 Environmental Scan

for

The Colleges of Applied Arts and Technology of Ontario

Contents

Introduction v

Key Sources of Information vii

1.0 Economy and the Labour Force 3

1.1 *Projected Canadian Employment Growth by Sector: 1998-2001* 7
1.2 *1998 Fastest Growing Companies in Canada* 8
1.3 *Projected Growth Occupations in High Technology to 2001* 9
1.4 *Employment in Ontario, by Industry, selected years* 10
1.5 *Employment in Ontario, by Occupation, selected years* 11
1.6 *Employment in Ontario, by Class of Worker, selected years* 12
1.7 *Employment in Ontario, by Employment Status and Age Group, selected years* 13
1.8 *Ontario Labour Force Participation Rates, selected years* 14
1.9 *Unemployment Rates in Ontario by Economic Region, selected years* 15
1.10 *Labour Force Profile of College Graduates, 1996* 16
1.11 *Average Starting Salaries for Employed College Graduates, selected years* 17

2.0 Education and Training 21

2.1 *Workplace Training and Education* 24
2.2 *Corporate Benefits of Workplace Learning* 25
2.3 *Employer Performance Trends: Formal Trainers and Non-Trainers* 26
2.4 *Career Colleges in Ontario* 27

3.0 Funding & Income 31

3.1 *College System Revenue, by source* 35
3.2 *Activity Base Funded by the General Purpose Operating Grant* 36
3.3 *Apprenticeship Training in Ontario, training days purchased* 37
3.4 *General Purpose Operating Grants over 10 years* 38
3.5 *General Purpose Operating Grant vs. Total Operating Grants* 39
3.6 *College Tuition Fees, 1997-98* 40
3.7 *Table: College General Purpose Operating Grant Changes vs. Government Revenue Changes* 41
3.8 *Table: Change in College System Revenue Between 1990-91 and 1996-97, by Source* 42

Contents

3.9 *Table: Full-time Postsecondary Enrolment and the General Purpose Operating Grant* 43
3.10 *Trends in Corporate Giving in Canada* 44

4.0 Information Technology **47**

4.1 *Learning Technologies: Future Challenges* 49
4.2 *Ontario Households with Home Computers, Computer Modems, and Access to the Internet* 50

5.0 Ontario Population **53**

5.1 *Ontario Population Growth, by Region* 55
5.2 *Ontario Population by Age Group and Region* 56
5.3 *Ontario Population Change between 1991 and 1996, by Age Group and Region* 57
5.4 *Ontario Population Projections, by Age Group* 58

6.0 Public Policy **61**

7.0 Operating Expenses **65**

7.1 *Non-Labour Costs Increase, Operating and Capital* 66
7.2 *1997 Compensation Costs* 68
7.3 *College System Revenue and Expenditures, 1996-97* 69

8.0 Learners **73**

8.1 *Full-Time Postsecondary Enrolment* 75
8.2 *Trends in Full-time Postsecondary Enrolment, by Program Division* 76
8.3 *Movement of College and University Students* 77
8.4 *Ontario Student Financial Assistance Program - College Trends:*
1. Levels of Student Assistance and Number of Recipients 78
2. Number of Awards by Student Group 79
3. Average Loan Amount by Student Group 79

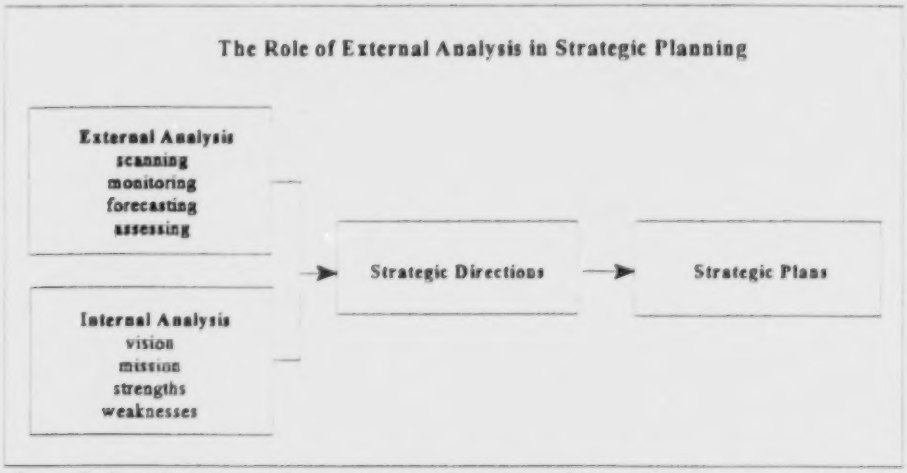
9.0 Human Resources **82**

9.1 *College Staff* 84
9.2 *Table: Full-time Staff in Ontario Colleges, 1984 to 1997* 85
9.3 *Trends in Human Resource Development* 86

Introduction

The Association of Colleges of Applied Arts and Technology of Ontario (ACAATO) is pleased to present the fifth edition of *The Environmental Scan.* This planning document builds on the feedback received from college stakeholders on its value and utility in supporting the colleges' strategic planning processes.

An effective strategic planning process involves a critical analysis of the external environment and how its many sectors interconnect and then applying this understanding in internal planning and decision making processes.



Source: The Primer for Institutional Research, Association for Institutional Research, 1992

The objective is to lessen the randomness of information used in decision-making and to alert managers and decision makers to trends and issues that may affect the organization. The goal is not to be surprised and, wherever possible, to manage the issues that will shape the organization's future. Environmental scanning can also assist educational institutions in understanding the changing needs of learners and in shaping how they market their programs and services to meet those needs.

Environmental Scanning is seen to have the following objectives:

- ✔ detecting scientific, technical, economic, social, and political trends and events important to the institution,
- ✔ defining the potential threats, opportunities, or changes for the institution implied by those trends and events,
- ✔ promoting a future orientation in the thinking of management and staff, and
- ✔ alerting management and staff to trends that are converging, diverging, speeding up, slowing down, or interacting. [1]

[1] source: Coates, J.F., Inc. (1985) *Issues identification and management. The state of the art of methods and techniques* (Research Project 2345-28) As quoted in *The Primer for Institutional Research*, Association for Institutional Research editors: Whiteley M. Porter J. Fenske R 1992

In order to focus this scanning, current research recommends that *environment* be organized along three levels.[2] The first level, and the broadest, is the *macro* environment which examines the social, technological, economic, environmental, and political sectors (STEEP) and how they affect institutions both directly and indirectly (an example being the Ontario recession of the early 1990's). Next is the *industry* environment which focuses on those factors and forces influencing a specific sector (for example, government student assistance programs) followed by the *task* environment which focuses on those areas specific to an institution.

In order to increase the utility of the annual ACAATO Environmental Scan in each college's strategic planning processes, the 1998-99 edition incorporates the following changes:

- ✔ A new *Economy and the Labour Force* section consolidates the Economy and Employment sections of the 1997 edition. Feedback received subsequent to the release of the 1997 edition revealed that while both sections are critical areas for research and analysis, understanding of how the forces of change in these areas impact and challenge colleges would be enhanced through their combination.
- ✔ The *Politics* section has been renamed *Public Policy* which is more in keeping with the section's focus on the influences of government policy directions and legislative/regulative changes.
- ✔ Where possible, regional information has been included. The *Ontario Population* section, for example, presents census population data and population projections in groupings that are consistent with the regional groupings of colleges.
- ✔ The 1998-99 edition will be available on the ACAATO web site in both "html" format for viewing on screen as well as "pdf" format for ease of downloading and viewing/printing through Adobe Acrobat Reader software.

The Association of Colleges of Applied Arts and Technology of Ontario (ACAATO) has prepared the 1998-99 Environmental Scan on your behalf and we welcome your feedback on the usefulness of this document in your advocacy and planning activities. We have provided a response sheet at the back of the Scan for your convenience. Feedback and comments should be directed to:

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[2] Fahey, L., King, W.R., & Narayanan, V.K., *Environmental Scanning and forecasting in strategic planning: the state of the art*. Long Range Planning, 14(1), 32-39, 1981. As quoted in The Primer for Institutional Research, Association for Institutional Research, 1992.

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Section 1:
Economy and the Labour Force

1998-99 Environmental Scan

Economy and the Labour Force

Key Findings

Ontario Annual Average:	Actual 1997	Projected 1998	1999	2000
Real GDP Growth (%)	**4.8**	3.5	3.0	3.0
Employment ('000)	**5,413**	Up to 5,629	Up to 5,800	Up to 5,973
Unemployment Rate (%)	**8.5**	7.1 - 7.4	6.4 - 7.1	6.2 - 6.9
CPI Inflation (%)	**1.9**	1.4	1.6	1.7

Source: Statistics Canada and Ontario Ministry of Finance. Table extracted from 1998 Ontario Budget Papers

- While the provincial and national economies continue to grow in strength, the recession of the early 1990's continues to be felt. According to Statistics Canada's 1996 Census:
  - Incomes of Canadians fell 6% between 1990 and 1995, wiping out the gains of the boom of the late 1980's;
  - Average earnings fell for all ages and levels of education, but the youngest were hardest hit;
  - 75 cents of every income dollar now comes from employment, which is down from 78 cents in 1990 and 86 cents in 1970. The rest comes from pensions, employment insurance, social assistance, tax benefits and investments. [a]

- Ontario's strong economic growth of 4.8% in 1997 was spurred by an increase in exports to the United States and a renewal in the income (and interest) sensitive areas of housing and big-ticket consumer items. Ontario's economic growth is projected to continue to be strong in these areas but more moderate in 1998 and subsequent years as exports to the U.S. slow moderately and uncertainty in the Asian markets continues to have an impact on the investment climate. [b]

- Strong national economic and productivity growth is, however, projected in the community, business, and personal services sector. [b] A recent economic outlook projects that close to half of

[a] source: Statistics Canada, Census 1996 as reported in the Globe and Mail, May 13, 1998

[b] see Exhibit 1.1

the jobs created during the next four years will be in this sector. [c] This should position Ontario for continued positive economic conditions given that approximately 44% of the province's employment is in these areas. [d]

- In 1997, the strongest employment growth was concentrated in the central and southern regions of the province. In 1998, it is projected to become more balanced regionally as the communications and the electronics manufacturing sectors in eastern Ontario continue to grow. Employment growth in the northern regions, however, is projected to continue to be slower given the weaknesses in the mining and primary metals sectors. [e]

- Employment is booming for small businesses that emphasize customer service.

  - A survey of Canadian entrepreneurs indicates that approximately 70% of survey respondents plan to increase their staff. Of high technology entrepreneurs, the rate increased to 83% while those in the financial sector increased to 82%. [f]

  - The emphasis on meeting the needs of the customer is a common theme among the top ten fastest growing companies in Canada, seven of which are based in Ontario. [g]

- Jobs for computer programmers and systems analysts almost doubled between 1992 and 1997 according to a recent Statistics Canada study of the labour market for computer programmers. [h] While demonstrating that employment for computer programmers and software analysts is booming, it raises questions about the widely projected high technology skills shortage:

  - Between 1992 and 1997, most of the employment growth occurred in urban areas. Ontario led the way (+58,000, a 90% growth rate) with Toronto, Ottawa-Hull, and Kitchener-Waterloo experiencing the most rapid employment growth. Ottawa-Hull had the highest concentration of software workers in 1997 (5.3% of all employed workers in the region).
  - In 1997, 4 out of every 10 programmers were aged 25 to 34, yet only 20% of newly hired workers (in the job one year or less) were under 25. Most of the growth in employment has been among workers old enough to have previous work experience.
  - High tech wages averaged $843 a week, slightly lower than those of scientific and technical workers (averaging $877 per week), with higher salaries going to those workers with more senior experience.

---

[c] source: Bank of Montreal, Economics Department *Prospects for Canada's Industries to 2001*, March 12, 1998. See also Exhibit 1.5

[d] see Exhibit 1.5

[e] see Exhibit 1.9

[f] source: as reported in Toronto Star, *Want a job? Don't focus on big names*, February 11, 1998

[g] see Exhibit 1.2

[h] source: Statistics Canada, as reported in The Daily, June 10, 1998 and in The Globe and Mail, June 11, 1998

- The number of self-employed computer programmers almost tripled over the study period and this growth accounted for almost one-third of the total growth in the sector. This suggests a growing trend for contracting out.

- While the debate of massive skills shortages in the high technology sector continues, strong growth in the software and hardware areas of this sector is projected to continue. [i]

- Part-time employment continues to grow at a rate faster than full-time employment and is most common in the sales and service sectors. It is also growing at a faster rate for workers between the ages 25 and 44 as well as those aged 45 and older. [j]

- Both full- and part-time employment grew at a faster rate for those aged 45 and older than for younger workers. [k]

  - This suggests a continued trend in the increasing skills and experience required in the changing economy which increases the importance of supporting the education and training needs of youths and ensuring the availability of support services and preparatory programs.

- The trend towards increased skills and experience and the employment opportunities that this 'upskilling' presents can also be demonstrated by looking at labour force participation rates.

  - Since 1992, while participation rates have dropped for youths aged 15 to 24, the decline has been especially large for those members of the total population who did not complete secondary school. [k]

- Self-employment continues to grow at a faster rate than traditional forms of employment. This trend is projected to continue. [l]

  - Between 1992 and 1997, self-employment grew 34% in contrast to the 8.2% increase in overall employment.

- College graduates continue to do well in securing employment. In 1996, 81.7% of those in the labour force were employed six months after graduation. By program area, the full- and part-time employment status of graduates varied considerably which may be reflective of the broader shift towards part-time and self-employment occurring in the economy. [m]

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[i] see Exhibit 1 3

[j] see Exhibit 1 7

[k] see Exhibit 1 8

[l] see Exhibit 1 6

[m] see Exhibit 1 10

- The proportion of 1996 college graduates not in the labour force also varied considerably by program area, which may be reflective of a trend toward seeking further training and education prior to entering the workforce.

- Average starting salaries for college graduates overall have remained relatively constant between 1991 and 1996. By program area, however, there is some variance which may be attributed to whether the occupation was primarily found in the public sector. [n]

  - Average starting salaries for program areas such as 'social services', 'health technology' and 'nursing and related' declined moderately while the average starting salaries for areas such as 'technology', 'visual and creative arts' and 'office and business administration' increased moderately.

[n] see Exhibit I 11

Exhibit 1.1

Projected Canadian Employment Growth by Sector: 1998 - 2001[1]

Higher Growth *Above 2.5%*		**Medium Growth** *1% - 2.5%*		**Lower Growth** *Below 1%*	
Machinery	4.8	Motor Vehicle Parts	2.5	Health Services	0.9
Business Services	4.0	Retail Trade	2.4	Textiles	0.9
Plastic	3.9	Motor Vehicles	2.4	Pipelines	0.9
Hospitality/Recreation	3.4	Furniture	2.1	Beverages	0.7
Electrical/Electronic	3.1	Transportation/Storage	2.1	Education Services	0.6
Other Manufacturing	3.1	Wholesale Trade	2.1	Fishing	0.6
Construction	3.0	Communications	2.0	Mining	0.5
Personal Services	2.8	Rubber	2.0	Clothing	0.5
Aircraft & Parts	2.7	Fabricated Metal Prod.	1.6	Oil & Gas	0.5
		Chemicals	1.6	Government Services	0.3
		Non Metallic Minerals	1.6	Forestry	0.1
		Food	1.4	Other Utilities	0.0
		Agriculture	1.4	Other Transport. Equip.	-0.1
		Printing & Publishing	1.1	Paper	-0.3
		Financial/Real Estate	1.0	Primary Metals	-1.1
				Wood	-1.1
				Refined Petrol. & Coal	-1.3
				Leather	-1.6
				Tobacco	-2.4

All Industry Aggregate: 1.9%

[1] source: Bank of Montreal, Economics Department, *Prospects for Canada's Industries to 2001*, March 12, 1998

Exhibit 1.2

1998 Fastest Growing Companies in Canada [1]

The 10th annual survey by *Profit* magazine ranks the country's Top 100 companies by their growth over the last five years. In the 1998 ranking seven of the ten companies are based in Ontario. While not all companies have gone high tech, many have unique products.

A common theme among all is their ability to connect with their customers, often through educational seminars.

Company	Expertise	Revenue		Employees	
		1992	1997	1992	1997
Image Processing Systems Inc. Markham, ON	Machine-vision systems	$117,101	$30 M	11	225
RTO Enterprises Inc. Edmonton, AB	Rent-to-own furniture and appliance company	$442,000	$56.1 M	16	770
Discreet Logic Inc. Montreal, QC	Special effects software.	$892,000	$101.9 M	55	280
Versent Corp. Mississauga, ON	Laser Quest entertainment outlets	$529,006	$52.4 M	3	721
Equisure Financial Network Inc. North Bay, ON	Insurance brokerages	$820,800	$56.8 M	2	1,158
G.A.P. Adventures Inc. Toronto, ON	Adventure-tour operator	$140,866	$7.8 M	3	64
Tucows Interactive Ltd. Toronto, ON	Internet services and shareware distributor	$159,720	$8.6 M	3	161
NTS Computer Systems Ltd. Maple Ridge, BC	Specialty computers for school use	$463,077	$20.6 M	5	121
Newcon International Ltd. Toronto, ON	Specialty optical equipment	$101,374	$4.4 M	2	17
McGill Multimedia Inc. Windsor, ON	Interactive training and marketing software	$248,466	$8.4 M	4	57

[1] source: PROFIT: The Magazine for Canadian Entrepreneurs, June 1998 issue

Exhibit 1.3

Projected Growth Occupations in High Technology to 2001[1]

Although the following projections have been taken from a report that targets the Greater Toronto Area, the integration and impact of new technologies is presenting challenges for business, industry and educational institutions on a much broader geographic scale.

Computer Industry

Shortages have been identified by 'high-tech' industries for:

Embedded Systems Software Designers:
- Languages in demand: C, C++, Ada, Pascal, SmallTalk, Java, Visual BASIC, Assembler.
- Operating systems in demand: UNIX, VxWorks, pSOS, DOS, Win95, Windows NT, Windows 3.x, and OS/2.

Telecommunications Software Designers:
- Languages in demand: C, C++, Pascal, SmallTalk, Rational Rose, Java, Visual BASIC, PowerBuilder
- Operating systems in demand: UNIX, VxWorks, pSOS, Win95, Windows NT, Windows 3.x, and OS/2.

Management Information Systems (MIS) Software Designers:
- Languages in demand: Cobol, Cobol 2, JCL, CICS, IMS/DB/DC, Telon, Tal, REXX, Focus, PEM Hogan
- Operating systems/platforms in demand: MVS, IBM Mainframe, TSO/IPF, AS400, Tandem
- Data structures knowledge: VSAM, IMS, DB2.

Strong growth is projected for Systems Analysts, Computer Engineers, Database Administrator/Analysts.

Stable to moderate growth is projected for Local Area Network Administrators, Technical Support Specialists, Software Trainers, Technical Sales Personnel, Equipment Maintenance Workers, Electronic Equipment Installers, Internet Specialists and Network Security Experts.

Communications / Telecommunications / Film and Video

Occupations in demand include:

Telecommunication Installers and Repairers: shortages in niche areas of new and emerging technologies
Wireless Communication Engineers: for wireless communication systems, digital cellular phones, personal communication networks.
Technical Writers: for software manuals and publications.
Computer Animators: for films, computer games, computer simulation for aviation, medicine
Multimedia Specialists: coordinate the display of text, stills, graphics, video and graphic
Multimedia Software Designers: interactive computer-based training and promotional software applications.

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[1] source: Human Resources Development Canada *Towards 2001: Occupational Trends in the Greater Toronto Area*. December 1997

Exhibit 1.4

Employment in Ontario, by Industry [1]

selected years

Industry	Employment (Thousands)				Proportion of Employment			
	1992	1994	1996	1997	1992	1994	1996	1997
Agriculture and Other Primary Industries	162	155	160	150	3.2%	3.0%	3.0%	2.8%
Manufacturing	889	901	988	1,010	17.8%	17.5%	18.6%	18.7%
Construction	270	284	267	294	5.4%	5.5%	5.0%	5.4%
Transportation, Communication and Other Utilities	350	359	383	384	7.0%	7.0%	7.2%	7.1%
Trade	852	883	908	927	17.0%	17.1%	17.1%	17.1%
Finance, Insurance and Real Estate	356	340	337	349	7.1%	6.6%	6.3%	6.4%
Service	1,787	1,913	1,977	2,013	35.7%	37.1%	37.2%	37.2%
Public Administration	334	326	290	287	6.7%	6.3%	5.5%	5.3%
TOTAL *:	**5,001**	**5,161**	**5,311**	**5,413**	**100.0%**	**100.0%**	**100.0%**	**100.0%**

* Totals may not add due to rounding.

[1] source Statistics Canada, *Labour Force Annual Averages*, Catalogue No 71-529

Exhibit 1.5

Employment in Ontario, by Occupation [1]

selected years

Occupation	Employment (Thousands)				Proportion of Employment			
	1992	1994	1996	1997	1992	1994	1996	1997
Managerial and Other Professional	1,673	1,749	1,774	1,826	33.5%	33.9%	33.4%	33.7%
Clerical	831	782	757	746	16.6%	15.2%	14.3%	13.8%
Sales	490	521	537	575	9.8%	10.1%	10.1%	10.6%
Service	651	667	707	692	13.0%	12.9%	13.3%	12.8%
Primary Occupations	145	149	148	147	2.9%	2.9%	2.8%	2.7%
Processing, Machining and Fabricating	632	661	740	770	12.6%	12.8%	13.9%	14.2%
Construction	239	250	249	266	4.8%	4.9%	4.7%	4.9%
Transport Equipment Operating	167	186	191	192	3.3%	3.6%	3.6%	3.5%
Material Handling and Other Crafts	173	195	208	199	3.5%	3.8%	3.9%	3.7%
TOTAL *:	**5,001**	**5,161**	**5,311**	**5,413**	**100.0%**	**100.0%**	**100.0%**	**100.0%**

*Totals may not add due to rounding

[1] source Statistics Canada, *Labour Force Annual Averages*, Catalogue No 71-529

Exhibit 1.6

Employment in Ontario by Class of Worker

selected years [1]

	1992	1994	1996	1997
	('000)			
Private Sector Employees	3,495	3,583	3,760	3,769
Government	826	814	756	730
Self-employed	663	746	780	889
• *incorporated*	229	228	240	290
• *unincorporated*	434	518	540	599
Unpaid Family workers	17	16	16	25
TOTAL *	**5,001**	**5,161**	**5,311**	**5,413**

* Totals may not add due to rounding

Notes:

- The trend towards self-employment is evidenced by the fact that between 1992 and 1997, it grew at a faster pace than did overall employment: 34% versus 8.2%
- The trend continues towards a smaller, leaner government. Over the same time period, government employment declined 11.6%.

[1] source: Statistics Canada, *Labour Force Annual Averages*, Catalogue No. 71-529

Exhibit 1.7

Employment in Ontario by Employment Status and Age Group

selected years [1]

	1992	1994	1996	1997
	('000)			
Full-time:	**4,075**	**4,191**	**4,298**	**4,381**
15 - 24	445	396	387	382
25 - 44	2424	2497	2545	2596
45 +	1206	1298	1366	1403
Part-time:	**926**	**969**	**1,013**	**1,032**
15 - 24	376	385	391	390
25 - 44	330	352	374	374
45 +	220	231	247	268
TOTAL *	**5,001**	**5,161**	**5,311**	**5,413**

* Totals may not add due to rounding

Notes:

- Between 1992 and 1997, part-time employment grew at a faster rate than full-time employment and total employment: 11.5% versus 7.5% and 8.2% respectively.

- For those aged 45 and older, both part- and full-time employment grew at rates faster than those for younger workers. This signals a continued trend towards the economy's growing need for workers with skills and experience.

- The impact of the recession of the early 1990's on those between the ages 15 and 24 is evidenced by the fact that between 1992 and 1997, youth full-time employment declined 14.8% while part-time employment grew a modest 3.7%. Over the same time period, youth labour force participation rates have declined. [2] These facts suggest a growing trend for youths to stay in school longer to obtain the skills and knowledge for success in the changing economy.

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[1] source: Statistics Canada, *Labour Force Annual Averages*, Catalogue No. 71-529

[2] see Exhibit 1.8

Exhibit 1.8

Ontario Labour Force Participation Rates

selected years [1]

By Age:

	1992	1994	1996	1997
15 - 19	55.4	50.0	49.1	49.6
20 - 24	78.7	75.3	75.7	76.1
25 - 44	86.1	85.7	86.0	85.8
45 - 64	69.6	69.3	69.0	69.1
65 +	7.4	7.7	6.9	6.9
All Ages	**67.7**	**66.5**	**66.0**	**65.9**

By Educational Attainment:

	1992	1994	1996	1997
0 to 8 years	34.8	31.7	27.4	26.7
Some Secondary Education	57.2	54.1	52.5	51.4
Graduated from High School	71.4	69.6	69.4	70.0
Some post-secondary	73.1	70.3	72.2	71.2
Post-secondary certificate/diploma	79.1	77.7	77.4	76.8
University Degree	84.1	83.3	82.9	82.3

[1] source: Statistics Canada, *Labour Force Annual Averages*, Catalogue No 71-529

Exhibit 1.9

Unemployment Rates in Ontario by Economic Region, selected years [1]

Economic Region	1992	1994	1996	1997
Ottawa	8.4	7.8	8.7	9.2
Kingston-Pembroke	10.7	10.0	10.9	11.5
Muskoka - Kawarthas	12.0	12.4	9.8	10.0
Greater Toronto Area	11.4	10.3	9.2	8.1
Kitchener - Waterloo - Barrie	10.1	8.1	8.1	7.6
Hamilton - Niagara Peninsula	11.5	9.4	8.5	8.3
London	8.9	7.6	8.8	7.9
Windsor - Sarnia	11.1	9.5	9.6	8.8
Stratford - Bruce Peninsula	8.4	6.9	5.7	6.5
Northeast	13.9	12.3	11.0	10.8
Northwest	9.9	10.1	10.0	9.7
Province wide	**10.9**	**9.6**	**9.1**	**8.5**

Notes:

1. **Ottawa:** includes the counties of Stormont Dundas and Glengarry, Prescott and Russell, Leeds and Grenville and Lanark, as well as the Ottawa-Carleton Regional Municipality.
2. **Kingston - Pembroke:** includes the counties of Frontenac, Lennox and Addington, Hastings, Prince Edward, and Renfrew.
3. **Muskoka - Kawarthas:** includes the counties of Northumberland, Peterborough, Victoria, and Haliburton, as well as the Muskoka District Municipality.
4. **Greater Toronto Area:** includes the municipalities of Durham Region, York Region, Metropolitan Toronto, Peel Region, and Halton Region (excluding the city of Burlington).
5. **Kitchener - Waterloo:** includes the counties of Dufferin, Wellington, and Simcoe as well as the Waterloo Regional Municipality.
6. **Hamilton - Niagara Peninsula:** includes the city of Burlington, Brant County and the municipalities of Hamilton-Wentworth, Niagara Region, and Haldimand-Norfolk Region.
7. **London:** includes the counties of Elgin, Oxford, and Middlesex.
8. **Windsor - Sarnia:** includes the counties of Kent, Essex, and Lambton.
9. **Stratford - Bruce Peninsula:** includes the counties of Perth, Huron, Bruce, and Grey.
10. **Northeast:** includes the districts of Nipissing, Parry Sound, Manitoulin, Sudbury, Timiskaming, Cochrane, and Algoma, as well as Regional Municipality of Sudbury.
11. **Northwest:** includes the districts of Thunder Bay, Rainy River, and Kenora.

[1] source: Statistics Canada. *Labour Force Annual Averages*, Catalogue No. 71-529

Exhibit 1.10

Labour Force Profile of College Graduates, 1996[1]

	Social Services	Visual & Creative Arts	Hospitality	Office & Business Administration	Health Technology	Nursing & Related	Technology
In the Labour Force:							
...Employed Full-time	55.2	62.8	68.5	63.4	55.6	40.0	69.3
...Employed Part-time	28.2	20.8	16.4	16.7	28.8	38.7	11.2
...Looking for Work	16.6	16.4	15.1	19.9	15.6	21.3	19.5
Not in the Labour Force:	23.7	20.6	18.8	19.1	10.2	12.1	23.0

***Notes*:**

- Percentages are expressed in proportion to the total number of graduates in the survey
- "Full-time" includes full-time related, partially related, and unrelated.
- "Part-time" includes part-time related, partially related, and unrelated.

[1] source: Ministry of Education and Training, *Employment Profile: 1995-96 Graduates of Ontario Colleges of Applied Arts and Technology*

Exhibit 1.11

Average Starting Salaries for Employed College Graduates, selected years[1]

Program Area	1990	1993	1996
Social Services	$22,258	$21,975	$21,785
Visual & Creative Arts	19,696	20,730	23,246
Hospitality	17,853	17,871	18,088
Office & Business Administration	21,422	22,041	23,752
Health Technology	27,394	26,942	26,631
Nursing & Related	31,047	28,222	28,558
Technology	24,845	25,269	27,828
TOTAL	**$23,875**	**$23,220**	**$24,489**

Notes:

- Average starting salaries for college graduates six months after graduation have remained relatively constant since 1990. Modest gains in the average starting salaries were recorded in 1996 which is most likely reflective of a recovering provincial economy that is growing in strength.

- Significantly higher than average starting salaries in a number of individual program areas have consistently been recorded in the technology and health technology areas.

[1] source: Ministry of Education and Training, *Employment Profile: Graduates of Colleges of Applied Arts and Technology*. For the years 1989-90, 1992-93 and 1995-96

Section 2:
Education & Training

1998-99 Environmental Scan

Education & Training

Key Findings

- A July 1998 opinion poll provides evidence of growing public recognition of the value of a technical education.
  - 35% of those polled chose a college diploma in a technical education as the type of education most likely to lead to employment,
  - 24% chose apprenticeship programs,
  - 18% selected a university degree in science while only 3% chose an arts degree. [a]

- Employer investment in workplace education and training is critical to maintaining a competitive edge in today's economy. Without adequate investment in workforce training and education, employers will be unable to develop the full potential of that investment.

  - In a recent Canadian study, it was shown that the top five benefits to employers of investing in training and education include:
    1. Increased ability to handle training on the job
    2. Better team performance
    3. Improved labour-management relations
    4. Increased quality
    5. Improved results in job-specific training / quicker training results [b, c]

  - An American study further demonstrated that companies that invested more heavily in workplace learning had higher net sales and gross profits per employee. It also found that leading edge companies were more likely to:
    - train a larger proportion of their employees,
    - outsource training, and
    - incorporate more of the latest learning technologies into that training. [d]

- Opportunities and challenges exist for colleges in meeting the education and training needs of the workforce. Becoming market driven will necessitate colleges to rethink how, when and where training is provided in order to respond to individual and employer needs.

- Significant benefits also accrue to employees in terms of wage gains, greater employability, and increased job satisfaction which also benefit employers.

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[a] source: Angus Reid Group / Ernst & Young, *Competitiveness, Jobs & Training: Ontarians Attitudes Towards Job Creation and Economic Growth*, July 1998

[b] source: Conference Board of Canada, *The Economic Benefits of Improving Literacy Skills in the Workplace*, August 1997

[c] see Exhibit 2.3

[d] see Exhibit 2.2

- The trend towards non-standard employment currently has a negative impact on employer sponsored training support and could result in a growing polarization in skills and education between core employees and short-term / contractual workers. [e]
  - As job tenure, as well as the level of education, increases so does the level of employer sponsored training
  - Individual responsibility for job-related skills training is projected to increase and take on greater importance in a knowledge-based economy.
  - Colleges will continue to be challenged to provide flexible delivery methods. The availability of financial assistance will also be increasingly important.

- Supporting literacy and lifelong learning are becoming especially important as the Canadian population, and in turn the workforce, becomes proportionately older. The provision of adult education and upgrading programs are key tools in supporting these objectives.
  - As an incentive for adults to complete their high school education, effective July 1, 1998 British Columbia eliminated tuition fees for adult basic education courses at colleges and technical institutes. Students enrolled in these courses had previously been required to pay about $120 per course.
  - In Ontario, a restructuring of the Literacy and Basic Skills (LBS) Program has been proposed in order to standardize funding across sectors. This may impact the program funding levels to colleges. Changes are anticipated to be phased in over the next several years in order to minimize impact.

- The Ontario Ministry of Education and Training is currently undergoing a review of programs and services for adult learners 21 years and older. The *Adult Education Project* will be looking at English as a Second Language (ESL) programs, high school adult credit programs, the General Educational Development (GED) high school equivalency diploma, and alternative delivery strategies. The objective is to develop a more coordinated approach across all sectors. For ESL programs the aim is also to move to contract based funding versus the current formulaic approach which may be a consideration for colleges.

- Changes to the funding of apprenticeship training announced by the Ontario government in January 1998 are moving forward. These changes involve:
  - the introduction of tuition fees for the classroom component of apprenticeship training (to partially compensate for the federal government's withdrawal of funding) [this component has been deferred pending the completion of a Labour Market Development Agreement with the Federal Government];
  - the introduction of fees for MET services such as registration and examinations;
  - the introduction of a new legislative and regulatory framework that will focus more on training than on conditions for employment; and
  - more involvement of industry through industry advisory committees.
  - expanding apprenticeship eligibility in the following sectors: high technology, manufacturing, service, hospitality and tourism.

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[e] source: Canadian Policy Research Networks Inc., *Training for the New Economy: A Synthesis Report*, Betcherman, K. McMullen, K. Davidman, June 1998

- With the changes to the Apprenticeship Program, the availability and affordability of financial assistance will be an important consideration for prospective students.

    - A 1995 study of high school leavers indicated that apprenticeship training was the most commonly sought program for those who pursued postsecondary education. [f]
    - With many school leavers indicating family and work responsibilities, the tuition and related fees may become a barrier to accessing training if adequate financial assistance is not made available.

- In response to the growing need for Canadian retailers to be competitive with U.S. rivals, in September 1998 Ryerson Polytechnic University's School of Retail Management began offering a four year Bachelor of Commerce degree. This is the first of this kind in Canada as compared to over 50 university level programs currently offered in the United States. [g]

- As the knowledge economy becomes a global economy and boundaries between countries become increasingly open, the *degree* credential will continue to grow in profile as an internationally recognized credential.

- Career colleges, or private vocational schools, continue to be competitive training providers despite tuition fees and related costs that are substantially higher than those at community colleges. Shorter program lengths and flexible delivery methods are attracting a growing number of adult learners.

    - The majority of program growth has occurred in the areas of Business and Applied Arts.
    - In 1997-98, 52% of those students at career colleges receiving financial assistance were classified as married or sole support in contrast to 32% at colleges of applied arts and technology and 10% at universities. In absolute numbers, however, there were more married and sole support students attending colleges of applied arts and technology. [h]

- In order to continue to respond to the education needs of students and to support the transferability of credits, Ontario colleges of applied arts and technology and universities are exploring more partnership and articulation arrangements. The web site of the Ontario College-University Transfer Guide is scheduled to be launched by the College-University Consortium Council in 1998-99 which will raise awareness of these arrangements and students' educational choices.

See also Section 8: Learners

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[f] source: Human Resources Development Canada, Statistics Canada, *After High School: The First Report of the School Leavers Follow-up Survey 1995*, Catalogue No. LM-419-09-96

[g] source: as reported in Canadian HR Reporter, April 6, 1998

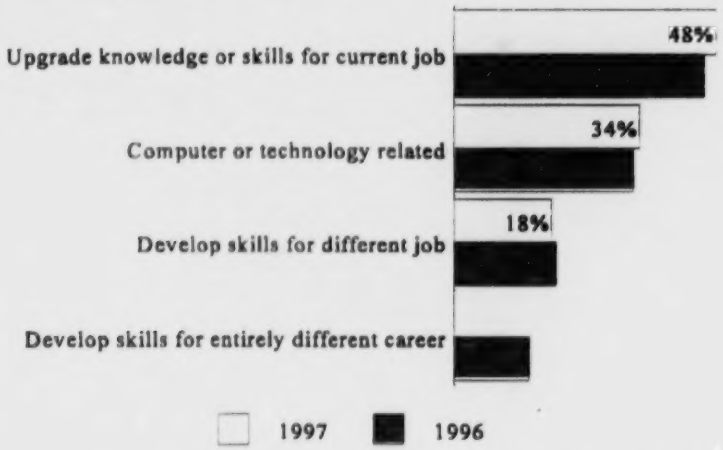
[h] see Exhibit 2.4

Exhibit 2.1

Workplace Training and Education[1]

Commissioned by the Royal Bank of Canada, the Angus Reid Group undertook a national workplace survey in 1996 with a sample size of 850 individuals to explore job satisfaction and security, training issues, the company and the spirit of entrepreneurship in Canada. The survey was conducted again in 1997, with a sample size of 1,000 individuals, and a summary report with comparative results was released in January 1998. In summary:

- Keeping skills and knowledge up to date for their current job was the primary motivation for individuals to seek further training:



- Over the next year, 49% of survey respondents planned on taking courses to upgrade their knowledge or skills for their current job, and a further 46% planned on taking computer or technology related courses.

- 43% cited 'keeping up to date' as a challenge for the workplace but only 18% ranked it as a personal strength:

	Challenge	Strength
Flexibility	23%	41%
Innovation	27%	33%
Initiative	23%	26%
Leadership	28%	25%
Teamwork	12%	23%
Responsibility	8%	21%
Keeping up to date / learning	43%	18%

[1] Source: The Angus Reid Group, *Workplace 2000 Working Toward the Millennium: A portrait of working Canadians*, Fall 1997

Exhibit 2.2

Corporate Benefits of Workplace Learning[1]

A national American study of corporate training practices reveals that companies that invest more heavily in workplace learning are more successful and profitable.

The American Society for Training and Development (ASTD) compared 540 U.S. corporations' expenditures on workplace learning during 1996 with their performance during the first half of 1997.

In the first phase, two sub-samples of companies were identified: those that invested an average of $900 per employee on learning and those that invested an average of $275 per employee. It was found that the top group outpaced those in the bottom group by:

- 57% higher net sales per employee,
- 37% higher gross profits per employee, and
- a 20% higher ratio in market-to-book values.

The second phase of the study involved identifying a group of 32 companies with leading edge workplace learning practices and analyzing company performance against a set of indicators. The study found that leading edge companies:

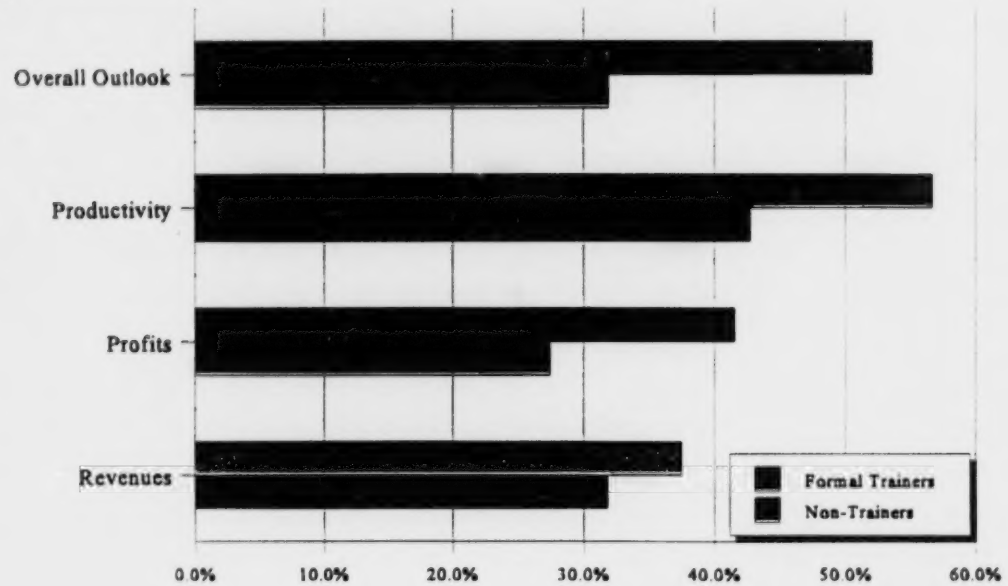
- spend more - up to 6 percent of payroll on workplace learning;
- train a larger percentage of their employees (85.9% on average) and maintain a lower employee-to-trainer ratio;
- deliver more of their training via learning technologies and predict more use of the newest learning technologies - CBT, interactive video, multimedia, intranets, and electronic performance support systems;
- outsource more - 11 to 18 percent higher than the industry average in the use of training companies and educational institutions to deliver learning; and
- are more likely to use innovative training practices - such as 360-degree reviews, individual development plans, and mentoring or coaching - and high performance and compensation practices simultaneously.

[1] source: American Society for Training & Development *1998 State of the Industry Report* January 1998

Exhibit 2.3

Employer Performance Trends: Formal Trainers and Non-Trainers [1]

Percent of Firms Reporting Significant Improvement from 1993-95, Based on 1993 Training Commitment



Notes:

- Benefits accrue to employee in terms of wage gains, increased self-confidence, greater employability, improved job performance, and increased job satisfaction.
- In addition to the benefits to firms in the areas of increased revenues, profitability, productivity and outlook, firms also benefit in terms of improved employee relations.

[1] source: Canadian Policy Research Networks Study *Developing Skills in the Canadian Workplace - The Results of the Ekos Workplace Training Survey*, Betcherman, G., Leckie N., McMullen K., 1997 AS PRESENTED IN *Training for the New Economy: A Synthesis Report* Betcherman G., McMullen K., Davidman K., June 1998

Exhibit 2.4

Career Colleges in Ontario [1]

Growth in the number of delivery sites of major competitors:

	1987-88	1991-92	1998-99 *
Academy of Learning	0	16	62
Toronto School of Business	6	14	30
Ontario Business College	6	8	13
CDI Career Development Institutes	0	4	12

* *As of May 28, 1998*

Notes:

- Between 1997-98 and 1998-99, the number of delivery sites of the top four major career colleges increased 13.6%, or by 14 delivery sites.
- Since the late 1980's, the majority of growth has occurred in the broad program areas of Business and Applied Arts.
- While the number and profile of students enrolled in career colleges / private vocational schools across the province is unknown, using OSAP awards data it can be determined that:
  - 23,175 students in private vocational schools received both Canada and Ontario student loans through OSAP in 1997-98 [2]; an increase of 16% since 1993-94.
  - Of this number, approximately 36% were classified as independent, 29% as sole support, and 23% as married. 12% were classified as dependent (either at home or away).
- In contrast, of the 73,450 students at colleges of applied arts and technology who received OSAP awards in 1997-98, approximately 34% were classified as independent, 12% as sole support, and 10% as married. 44% were classified as dependent (again, either at home or away).

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[1] source: Private Vocational Schools, Ontario Ministry of Education and Training

[2] as of May 24, 1998

Section 3:
Funding & Income

1998-99 Environmental Scan

Funding & Income

Key Findings

- The balance of funding that colleges receive continues to shift towards 'non-traditional' revenue sources.
  - In 1996-97, 38% of college system revenue came from tuition fees, ancillary income and other income (e.g., investments, donations); up from 23% in 1990-91.
  - Over the same time period, the proportion of system revenue from tuition fees alone has doubled, from 10.4% in 1990-91 to 20.7% in 1996-97 while the proportion of MET based revenue has dropped to 48% of college system total revenue. [a]
- On a per student funding basis, Ontario government support to colleges continues to decline. Between 1977-78 and 1996-97, spending per college student declined 32%.[b] The moderate projected increase in 1997-98 is primarily due to the increase in tuition fee revenue as the province's general purpose operating grant support to colleges declined further in 1997-98.

Expenditures per Client Served (Adjusted for Inflation)	Index (1977-78 = 100)		
	1995-96	1996-97	Projected 1997-98
Universities (cost per FTE student)	87.4%	Not available	
Colleges of Applied Arts and Technology (cost per FTE student)[c]	**71.4%**	**67.8%**	**68.6%**
Elementary and Secondary Education (cost per pupil)	133.0%	Not available	

- The implementation of key performance indicators is planned for 1998-99. Data collected for three indicators (graduate employment, graduate satisfaction, and employer satisfaction) will be used to determine college performance funding starting in 1999-2000. Data will also be collected on graduation rates and student satisfaction levels although it is anticipated that results won't initially be tied to performance funding.

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[a] see Exhibit 3.7

[b] source: Council of Ontario Universities, *1997 Resource Document*, March 1998 and Ontario Ministry of Education and Training, Colleges Branch

[c] percentages updated from the ACAATO 1997 Environmental Scan to reflect more accurate revenue and activity base data

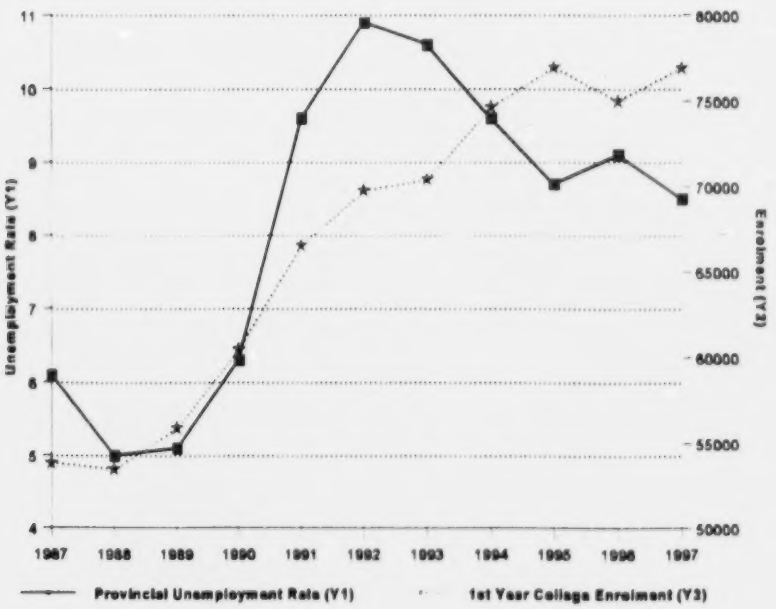
- This initiative is part of the government's objective to demonstrate public sector accountability and is projected to be used to leverage change in other public sectors prior to the next election.

- The Ontario government plans to introduce a bill in 1998-99 that will require hospitals, nursing homes and other health care agencies to report publicly on their performance. Areas for reporting being considered include: the number of nurses and the patient-nurse ratio, death and disease rates, how long patients stay in the institution, and how often patients are readmitted. [d]

❍ While colleges continue to support demonstrating their accountability through the use of key performance indicators, efforts continue to achieve change in a separate but interrelated area, the distribution mechanism of the general purpose operating grant.

- The current formula based on each college's share of system activity over three years, with one slip year, has created a tendency to 'grow for growth's sake' in order to maintain one's share of the operating grant.

- The 33% growth in college enrolment since 1990-91 corresponds with the high provincial unemployment rates characterizing this period: [e]



[d] as reported in the Toronto Star, June 16, 1998

[e] source: Statistics Canada, *Labour Force Annual Averages*, Catalogue No. 71-529 and Ontario Ministry of Education and Training

- While continuing to benefit the increasing number of Ontario residents seeking access to retraining and further education in order to be successful in an increasingly 'knowledge based society', this growth, combined with government funding reductions, has had a negative impact on per student funding levels. Since 1990-91, it has decreased 42%; from $5,125 to approximately $2,972 in 1997-98.

    - Per student funding is, however, projected to increase moderately in 1998-99 to $3,129 with the reduction of 'off the top' targeted funds. [f]

- A growing consideration for colleges is how to respond to the growing demand for training with fewer resources: between 1995-96 and 1996-97, skills training revenue to colleges from all sources (e.g., federal, provincial, and other contracts) declined 28% or approximately $100 million.

- Colleges continue to serve as the main provider of apprenticeship training, although the number of training days purchased from non-college trainers continues to increase. [g]

- The Federal government remains committed to withdrawing from funding training directly and is now negotiating with Ontario for the development of an agreement for a more coordinated approach to training. The outcomes of these negotiations are anticipated to have an impact on the funding available for apprenticeship training, including the level of tuition fees for apprentices.

- Colleges will continue to be challenged to respond to the growing demand for this training with fewer resources.

- As colleges pursue corporate support in an increasingly competitive environment it is important to demonstrate the tangible benefits that will accrue to the institution, the community, and the benefactor as well as an urgency of need.

    - There is growing corporate interest in investing in human capital and the colleges' demonstrated responsiveness in meeting the education and training needs of individuals should be an asset in cultivating support. [h]

- In response to strong concerns by industry of a 'high tech' skills shortage, the government has established an 'Access to Opportunities' program which is intended to increase enrollment in computer science and high demand engineering and related technology programs at both colleges and universities. $150 million over three years, including support for one-time start-up costs and not including required industry funding support, has been committed for this program.

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[f] see Exhibit 3.3

[g] see Exhibit 3.2

[h] see Exhibit 3.10

- Effective 1998-99, colleges were given increased flexibility and discretion in the setting of tuition fees by program. Under the new policy:

  - the maximum allowable fee increase for the majority of college programs in each of 1998-99 and 1999-2000 is 5% for 'improving the quality of students' programs' with a further 5% allowable to invest in 'additional educational program improvements;
  - deregulated fees for programs identified by Boards of Governors to have strong employment prospects and an expectation of high incomes for graduates, as well as programs identified by the Ministry of Education and Training through the Access to Opportunities Program noted above (the proviso that these programs are limited to a maximum of 15% of college enrolments);
  - deregulated fees for post diploma programs;
  - a maximum annual allowable increase of 20% for students currently enrolled in programs with deregulated fees; and
  - 30% of the annual increase in tuition fee revenues set aside for student financial assistance.

- Under the OSAP Program, the maximum allowable limit for tuition and incidental fees has been set at $4,500. Colleges are required to provide financial assistance for students in need to cover amounts over $4,500.

- With this increased tuition fee setting flexibility, the availability of financial assistance and the OSAP maximum allowable limit will be increasingly important considerations for colleges, especially given the increased proportion of married and sole support students in the colleges.

  - Funds made available through the additional fee revenue and the $46.9 million raised through the Ontario Student Opportunity Trust Fund will address some of this need, however, this issue is anticipated to remain a significant consideration for students in pursuing further education.

For student information refer to Section 9: Learners

Exhibit 3.1

College System Revenue [1]

REVENUE SOURCE	1993-94 (millions)	1994-95 (millions)	1995-96 (millions)	1996-97 (millions)
General Purpose Operating Grant	708.3	696.9	691.7	604.3
Skills Training: Federal Purchases	95.1	95.5	79.3	57.0
Skills Training: MET/OTAB	167.9	185.7	169.3	108.8
Skills Training: Other Contracts	117	122.6	114.0	96.5
Specific Purpose Operating Grant	112.7	101	110.5	87.1
Capital Grants	59	29.8	84.1	29.0
Tuition Fees	231.3	245	275.2	309.3
Ancillary Income	126.4	129	132.6	124.1
Other Income	68.5	78.9	76.5	80.0
TOTAL*:	**1,686.2**	**1,684.4**	**1,733.2**	**1,496.1**

Notes: Due to differing accounting and reporting methodologies used, CFIS revenues ascribed to an identified funding agency or source may not reconcile precisely with the accounts of the agency and source for a given year.

* Total Revenue is taken directly from CFIS reports. Revenue Sources may not add up due to rounding.

[1] Ontario Ministry of Education and Training, College Financial Information System, Summary Report, January 29, 1998

Exhibit 3.2

Activity Base Funded by the General Purpose Operating Grant [1]

YEAR	Activity Base (converted to Funding Units)							
	Full-Time Postsecondary	Index of Activity (1986-87=100)	Full-Time Tuition Short	Index of Activity (1986-87=100)	Part-Time Postsecondary	Index of Activity (1986-87=100)	Part-Time Non-Post-secondary	Index of Activity (1986-87=100)
1986-87	100,830.8	100.0%	5,295.5	100.0%	8,935.2	100.0%	5,896.9	100.0%
1987-88	100,704.9	99.9%	5,472.4	103.3%	8,971.3	100.4%	6,575.5	111.5%
1988-89	100,030.4	99.3%	5,879.8	111.0%	9,336.2	104.5%	6,681.1	113.3%
1989-90	102,215.8	101.4%	5,638.5	106.5%	8,827.7	98.8%	6,703.2	113.7%
1990-91	109,554.0	108.7%	6,922.2	130.7%	9,827.8	110.0%	7,369.1	125.0%
1991-92	141,657.5	140.5%	8,087.9	152.7%	10,969.5	122.8%	7,642.4	129.6%
1992-93	151,589.1	150.3%	8,528.6	161.1%	15,100.3	169.0%	9,790.6	166.0%
1993-94	156,745.3	155.5%	8,322.9	157.2%	14,632.5	163.8%	9,231.5	156.5%
1994-95	161,087.1	159.8%	7,920.3	149.6%	13,761.3	154.0%	8,435.7	143.1%
1995-96	169,269.6	167.9%	7,344.5	138.7%	13,455.1	150.6%	8,618.0	146.1%
1996-97	167,722.3	166.3%	6,020.8	113.7%	12,579.8	140.8%	8,030.6	136.2%

Part-Time Postsecondary includes: Mandatory Postsecondary; Postsecondary Electives; Post-diploma Health

Part-Time Non-Postsecondary includes: Basic Communication and Numeric Skills; Occupational Certification; Prior Learning Assessment (as of 1993-94); Ontario Management Development Program (OMDP); Miscellaneous; Tuition Short Courses; Other Vocational

Note: New program weights for full-time postsecondary introduced 1991-92. New part-time conversion formula introduced effective 1992-93

[1] source: Ontario Ministry of Colleges and Universities, College Affairs Branch, *Summary of Information Relevant to the General Purpose Operating Grant Allocations, 1981-82 to 1990-91*, June 1990 (as presented in the 1993 ACAATO Environmental Scan), and 1990-97 data from Ministry of Education and Training, Colleges Branch

Exhibit 3.3

Apprenticeship Training in Ontario[1]

Training Days Purchased

YEAR	CAATs		NON-CAAT TRAINERS		TOTAL
	Full-Time	Part-Time	Full-Time	Part-Time	
1988-89	789,462	116,833	1,560	0	907,855
1989-90	777,991	122,407	7,560	589	908,547
1990-91	972,237	123,363	15,033	2,140	1,112,773
1991-92	977,053	107,480	24,643	2,179	1,111,355
1992-93	834,143	100,129	33,878	2,187	970,337
1993-94	723,770	81,867	33,088	411	839,136
1994-95	661,217	100,098	34,432	60	795,807
1995-96	627,385	134,117	26,442	449	788,393
1996-97	517,493	139,859	27,135	1,273	685,760
1997-98	488,503	187,980	39,131	1,858	717,472
Planned:					
1998-99	509,434	235,747	53,995	1,194	800,369

[1] Source: 1989-1992 - Ontario Ministry of Skills Development, Apprenticeship and Client Services
1993-1998 - Ontario Ministry of Education and Training, Workplace Support Services

Exhibit 3.4

General Purpose Operating Grants[1]

Over 10 years

Fiscal Year	Activity Base (Weighted Funding Units supported by grant)[2]	General Purpose Operating Grant[3]	Grant per Weighted Funding Unit[4]
1987-88	121,724.1	586,836,175	$4,821
1988-89	121,927.5	613,243,803	$5,030
1989-90	123,385.2	645,773,556	$5,234
1990-91	133,673.1	685,039,064	$5,125
1991-92[5]	168,357.3	723,192,315	$4,296
1992-93	185,008.6	739,947,106	$4,000
1993-94	188,932.2	700,747,370	$3,709
1994-95	191,204.4	690,747,370	$3,613
1995-96	196,667.8	684,961,891	$3,483
1996-97	194,353.3	597,621,175	$3,075
Projected			
1997-98[6]	195,663.8	581,595,887	$2,972
1998-99[7]	195,663.8	612,153,320	$3,129

[1] Ontario Ministry of Education and Training, Colleges Branch, April 21, 1998

[2] derived from annual audit of enrolment report. The number shown represents the reported weighted funding units for the activity year, not the two or three year historical average used in the actual grant calculations.

[3] does not include special purpose grants. General Purpose Grant allocation for 1993-94 to 1995-96 has been reduced by $40 million to reflect the impact of the social contract reduction. GPOG allocation for 1997-98 does not include the amounts set aside for the Strategic Programs Investment Fund or Common Information Systems. In 1998-99, the GPOG allocation does not incude the amount set aside for Ministry initiatives.

[4] not adjusted for inflation. Not adjusted to reflect the additional impact of geographic and economy of scale adjustments included in the annual grant calculation.

[5] 1991-92 first activity year with new weights. Introduction of the new weights caused an inflation in the number of weighted funding units.

[6] estimate, derived by increasing the 1996-97 activity base (weighted funding units supported by grant) by the percentage increase in enrolment reported in the November 1997 and March 1998 enrolment reports by OCAS.

[7] Assuming flatline enrolment.

Exhibit 3.5

General Purpose Operating Grant
vs
Total Operating Grants to Colleges [1]

YEAR	General Purpose Operating Grant (GPOG)	Total Operating Grants (TOG)	GPOG as a Percentage of TOG
1986-87	562,642,545	598,300,000	94.0%
1987-88	586,836,175	625,600,000	93.8%
1988-89	613,243,803	661,700,000	92.7%
1989-90	645,773,556	700,400,000	92.2%
1990-91	685,039,064	771,500,000	88.8%
1991-92	723,192,315	826,900,000	87.5%
1992-93	739,947,106	868,400,000	85.2%
1993-94	700,747,370	808,200,000	86.7%
1994-95	690,747,370	807,900,000	85.5%
1995-96	684,961,891	809,200,000	84.6%
1996-97	597,621,175	688,781,299	86.8%
1997-98	581,595,887	686,461,500	84.7%
1998-99	612,153,320	686,461,500	89.2%

Note:
1. The GPOG for 1993-94 through 1995-96 has been reduced by $40 million to reflect the social contract.

[1] source Ontario Ministry of Education and Training

Exhibit 3.6

College Tuition Fees, 1998-99[1]

Province	1990-91 Fees ($)	1998-99 Fees ($)	% Increase
Ontario	740	1,543	109%
Alberta (average)	573	1,923	236%
British Columbia (average)	1,060	1,575	49%
Manitoba (average)	605	1,322	119%
New Brunswick	500	2,000	300%
Newfoundland	484	1,452	200%
Nova Scotia (average)	766	1,200	57%
Quebec	nil	nil	n/a
Prince Edward Island	1,118	2,000	79%
Saskatchewan	720	1,980	175%

[1] MET Telephone Survey of Fees, Report Date March 9, 1998

Exhibit 3.7

College General Purpose Operating Grant Changes vs. Government Revenue Changes

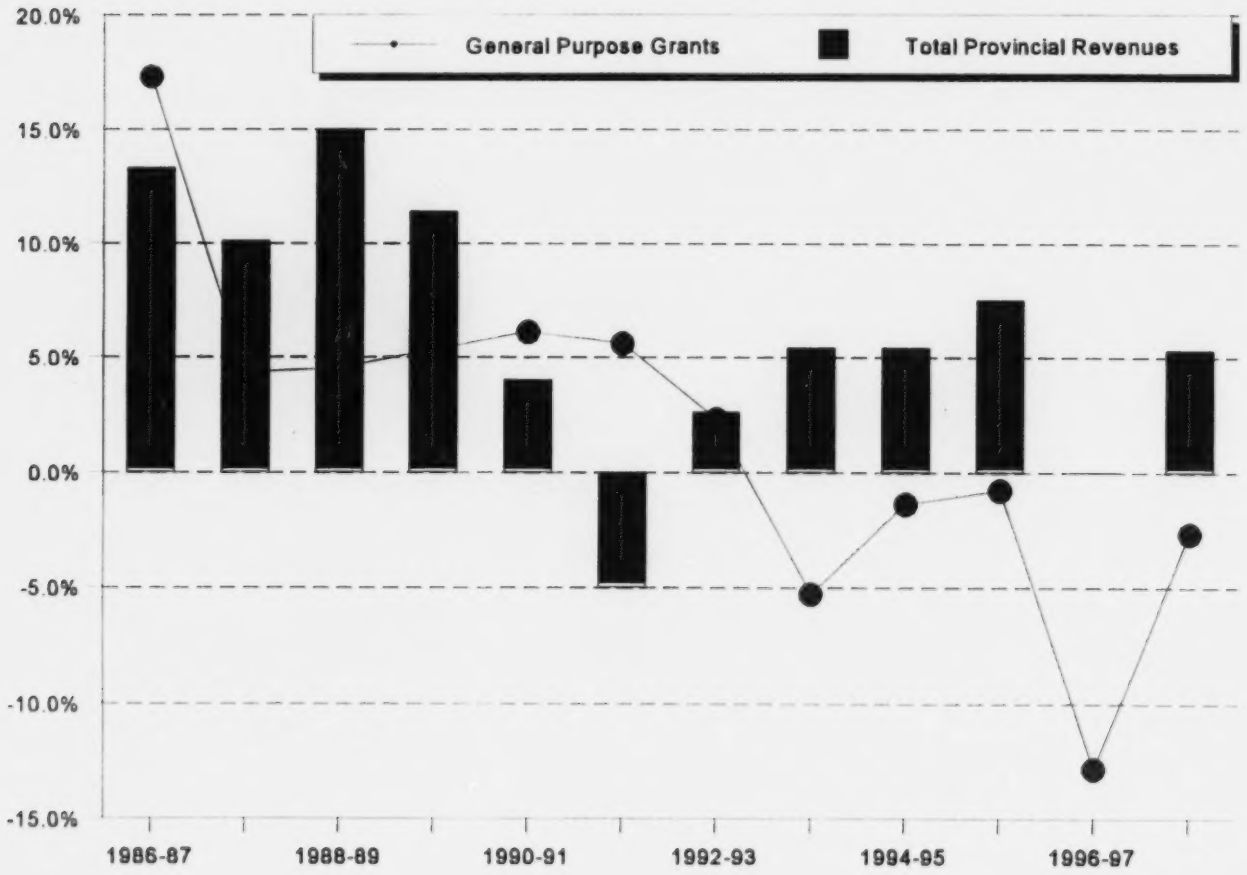
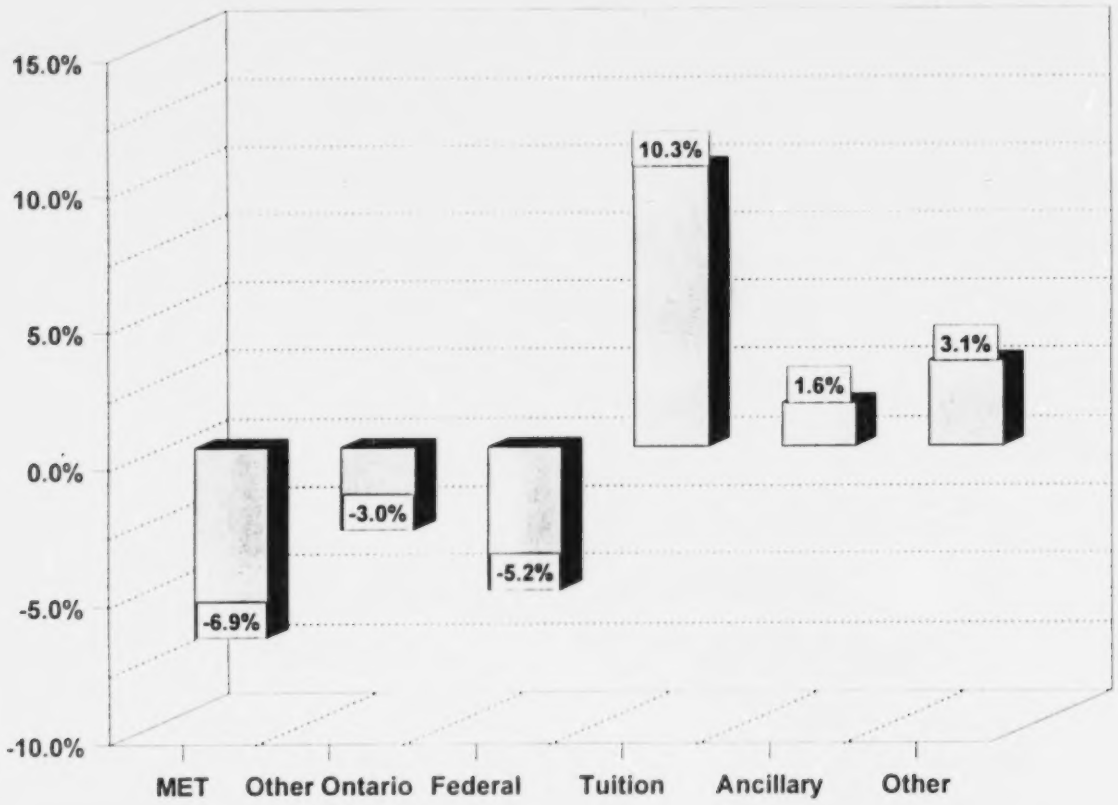


Exhibit 3.8

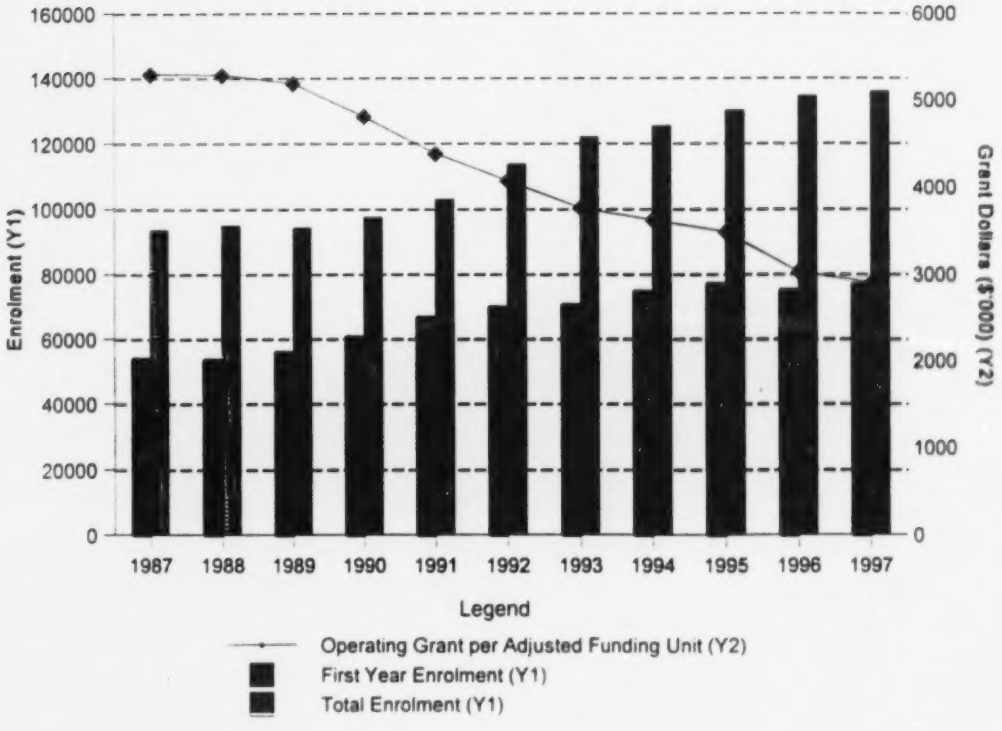
Change in College System Revenue Between 1990-91 and 1996-97, by Source[1]



[1] source Ontario Ministry of Education and Training, College Financial Information System Reports

Exhibit 3.9

Full-time Postsecondary Enrolment & The General Purpose Operating Grant[1]



[1] source: 1987 to 1994, Ministry of Education and Training OCIS and CAAT 2 surveys (excluding sponsored and International Students) November 1 count. 1995, 1996 and 1997 figures are from OCAS enrolment counts.

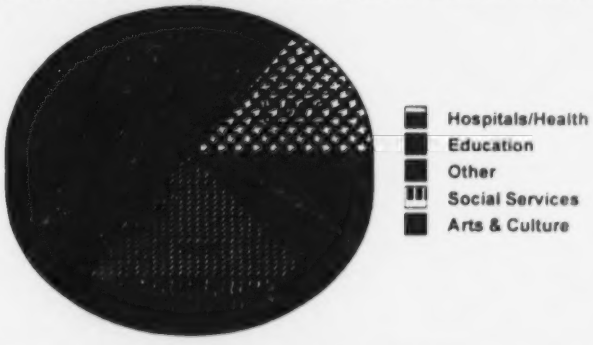
Exhibit 3.10

Trends in Corporate Giving in Canada [1]

A Spring 1998 news bulletin from Ketchum Fund Raising Counsel, with data from the Canadian Centre for Philanthropy, provides detailed information regarding trends in corporate giving in Canada. By means of summary:

- In 1995, Canadian corporations reported charitable donations totalling $629 million which represents 0.98% of 1995 Canadian pre-tax profits of $64 billion. The Centre for Business in the Community of the Conference Board of Canada revealed that corporate giving increased 6% in 1996 and a projected 7% in 1997.

- By sector, the distribution of corporate contributions were as follows:



- A Fall 1996 survey by the Canadian Centre for Philanthropy revealed that 50% of all corporate donations go to charities with revenues exceeding $1.5 million and that over 40% of corporate support goes to not-for-profit organizations in Ontario.

- A 1995-96 Corporate Community Investment in Canada survey revealed that *perceived needs of the community* and *support for company business* are key factors considered in selecting charities. Employee areas of interest are also important factors in determining corporate support.

- The Fund Raising Counsel's campaign experience reveals a growing corporate interest in investing in *human capital* as opposed to contributing to major building projects associated with not-for-profit organizations that are perceived as being overbuilt (e.g., hospitals and universities).

- Fast growing and high profit companies in the areas of finance, computer products, communications equipment and automotive parts is creating a new group of companies from which not-for-profit organizations can begin to cultivate support. Relationship building including demonstrating how charitable giving will support business and community objectives will be especially important to establish a pattern of giving.

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[1] Ketchum Fund Raising Counsel *Philanthropic Trends*, Spring 1998

Section 4:
Information Technology

1998-99 Environmental Scan

Information Technology

Key Findings

- Recognition is growing that people and the culture of the organization are critical factors in successfully integrating new technologies into the curriculum and the organization.

  - Provisions in the final version of a contract negotiated between York University and its faculty indicate that "professors would not be forced to use technology in their classrooms or to deliver courses over the Internet". Decisions to use technology for enhancing classroom sessions or for delivering courses to remote locations using video conferencing "shall be consistent with the pedagogic and academic judgements and principles of the faculty member". It also specifies that "a faculty member will not be required to convert a course without his/her agreement". [a]

  - In early 1998, as part of a labour dispute at Acadia University in Nova Scotia, faculty suspended their participation in the "Acadia Advantage" program. Under this program, students pay a tuition of approximately $5,000 and in return they receive a laptop computer, access to the Internet from almost anywhere on campus, training support, and the capacity to connect their computers in classroom and download notes and other material from their instructor's computer. As part of the labour dispute, faculty members unplugged their classroom computers which meant that students could not connect electronically with professors either in the classroom or by e-mail. [b]

  - In a 1997 survey of information technology executives, 80% of respondents believed that their current work process and structures were not supportive of new systems being implemented. In addition, over 60% believed that current information technology staff skills were not compatible with the new systems underway. [c]

- In support of the human resource challenges in integrating new technologies, a 1997 survey of HR executives indicates a growing trend for learning technologies that are flexible, easily customized, and able to be implemented quickly without a large change in infrastructure. [d]

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[a] source: As reported in The Chronicle of Higher Education, Section: Information Technology, October 3, 1997

[b] source: As reported in The Chronicle of Higher Education, Section: International, February 13, 1998

[c] source: The Hay Group, *The Hay Group's Second Annual Information Technology Strategy Survey*, October 21, 1997

[d] see Exhibit 4.1

- Traditional, on-campus students are increasingly accessing distance education courses as a way of easing busy schedules and balancing responsibilities. The need for flexible and customized programming continues to increase.

  - At the University of Manitoba, in 1995, 65% of distance education students were 26 years old or younger and 66% of that proportion were also taking courses on campus. [e]

  - The University of Colorado at Denver found that of 609 students enrolled in its distance education program in Spring 1998, more than 500 were also taking regular courses in the campus's classrooms. [e]

- Researchers in British Columbia have discovered that the appearance and structure of an on-line course can be as important as the lessons it conveys. Important factors include: integrating material from other parts of the Web through the use of hyperlinks, consistent menus and other navigational tools, accessibility through most Web browsers (including text-only versions), and instructor disclosure and credibility (who is actually responsible for courses' content). [f]

- The number of Ontario households going on-line continues to grow at an increasing rate; 41% of households in 1997 had a computer and of this proportion, 62% had a modem while 38% were also using the Internet. [g]

  - It is also significant to note that 59% of Ontario households *did not* have a computer in 1997. The number of households without this technology continues to decline but at a slower rate than those going on-line. For these households, the availability of and access to new technologies at schools and through workplaces will be increasingly important as a means for acquiring the skills to be successful in the increasingly knowledge-based economy.

- TV-based access devices are fast becoming the leading non-PC Internet access device in the United States and this trend may extend to Canada with the June 1998 launch of 'WebTV' in Canada by Microsoft.

  - 72% of American subscribers to this service have indicated their preference for this approach because it gives them access to electronic mail and the Internet without the cost of a home computer.

  - With this technology, an opportunity may exist for colleges to reach a broader range of individuals via on-line programming. [h]

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[e] source: The Chronicle of Higher Education, Section: Information Technology, March 27, 1998

[f] source: The Chronicle of Higher Education, Section: Information Technology, February 27, 1998

[g] see Exhibit 4.2

[h] source: The Globe and Mail, *Get your sets ready for WebTV,* June 10, 1998, Page E3

Exhibit 4.1

Learning Technologies: Future Challenges[1]

In a 1997 survey, the American Society for Training & Development asked human resource executives to identify what they considered to be the most important challenges between now and 2000 in using learning technologies.

The top three challenges identified illustrate a growing trend for learning technologies which are flexible, can be easily customized, and quickly deployed without a large change in technology infrastructure.

Rank	Challenge	Mean Rating (N=93)	Percent
1	Keeping pace with the rate of change	5.92	54.3%
2	Assessing the effectiveness of new learning technologies	5.55	39.6%
3	Knowing when and where to apply new learning technologies	5.54	41.8%
4	Integrating existing technologies with new learning technologies	5.49	35.2%
5	Getting top management buy-in	5.02	45.2%
6	Delivering existing courses/training using new learning technologies	4.49	18.7%
7	Developing new courses/training for new learning technologies	4.41	22.8%
8	Encouraging employees to use new learning technologies	4.30	23.9%
9	Finding HRD professionals knowledgeable about new learning technologies	3.76	18.5%
10	Other (e.g., sufficient resources - funding, time and personnel)	3.42	29.2%

[1] source American Society for Training & Development, *1997 National HRD Executive Survey on Learning Technologies*

Exhibit 4.2

Ontario Households with Home Computers, Computer Modems, and Access to Internet [1]

	1991	1992	1993	1994	1995	1996	1997
				('000's)			
Number of Households	3,585	3,647	3,765	3,820	4,143	4,193	4,227
With home computer (1)	768	829	983	1,078	1,346	1,503	1,720
...with computer modems (2)	--	--	--	378	602	740	1,058
...using Internet (3)	--	--	--	--	--	363	648
Without home computer	2,817	2,818	2,783	2,742	2,797	2,690	2,507

(1) Excludes systems which can only be used to play games or are used exclusively for business purposes.
(2) Includes internal and external units
(3) Includes only those households accessing the Internet from home.

[1] source: Statistics Canada, *Household Facilities and Equipment Survey*, Catalogue No. 64-202

Section 5:
Ontario Population

1998-99 Environmental Scan

Ontario Population

Key Findings

- In 1996, the majority of the Ontario population was located in the Greater Toronto Area (43%) followed by 27.5% in the Southwest region, 16.4% in the Eastern region, and 5.4% in the Central region. 7.7% of the population resided in the North which is down from 8.2% in 1991. [a]

- While the Ontario population grew 6.6% between 1991 and 1996, slightly higher than the national average of 5.7%, there was significant variation by region: [b]

  - There was virtually no population change in the Northern regions; the result being a shift in the population towards those aged 45 and older.
  - The largest percentage increase occurred in the Central region, although in absolute numbers the majority of the increase occurred in the Greater Toronto Area.
  - Both the Eastern and Southwest regions experienced growth approaching the national average.

- Between 1991 and 1996, the age distribution of the Ontario population as a whole remained relatively proportionate, though moderately older:

  - Although two-thirds of the population increase between 1991 and 1996 occurred in those aged 45 and older, this age group continues to comprise approximately one-third of the total population.
  - Almost 25% of the population increase occurred in the 0 to 14 age group while the number of those aged 20 to 24 declined 5.1%.

- This proportionate increase occurred in virtually all regions with the exception of the Northern regions.

  - The challenge of meeting the skills training and education needs of an increasingly older population across a larger geographic area is especially important for colleges in these regions.

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[a] see Exhibit 5 1

[b] see Exhibits 5 2 and 5 3

- The number of youths under the age 25 is projected to continue to increase although at a slower rate. They are projected to become a smaller proportion of the total population as the population ages. [c]

  - The challenges of providing flexible programming, recognizing and assessing 'informal' learning and adapting teaching methods for an increasingly older population are anticipated to continue for all colleges.
  - The introduction of key performance indicators (KPI) for graduate placement and satisfaction, employer satisfaction as well as student satisfaction and graduation rates increases the importance of responding to these challenges. [d]

- Increased life expectancy and death rates and declining fertility and birth rates accentuate the trend towards a proportionately older Canadian population. Both the provincial and national population and labour force growth in future will increasingly depend on immigration.

- The diversity of the Canadian population continues to increase, in large part to changing immigration patterns. In the 1996 Census: [e]

  - 4.7 million people reported a mother tongue other than English or French, a 15.1% increase from 1991, although only 2.8 million people reported speaking a non-official language at home.
  - Almost 80% of immigrants between 1991 and 1996 reported a language other than English or French as mother tongue. More than half were from Asia and the Middle East.
  - 3.2 million people identified themselves as members of a visible minority.

- The increasing diversity of the Canadian population is, in turn, changing the composition of the Ontario population, especially in its urban population: [f]

  - 42% of immigrants between 1991 and 1996 settled in Toronto.
  - 53% of the Canadian visible minority population resided in Ontario and of this proportion, 80%, primarily of Chinese and South Asian descent, resided in Toronto.
  - Members of visible minorities made up 12% of the Ottawa-Hull population.

- As the population becomes increasingly diverse, cultural diversity and sensitivity will be increasingly important for colleges.

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[c] see Exhibit 5.4

[d] see also Section 3.0 Funding and Income

[e] source: Statistics Canada, *Census 1996: Mother Tongue, Home Language and Knowledge of Languages*, December 2, 1997

[f] source: Statistics Canada, *Census 1996: Ethnic Origin, Visible Minorities*, February 17, 1998

Exhibit 5.1

Ontario Population Growth [1]
by Region

	1991	1996	% Change 1991 - 1996	# Change 1991 - 1996
East	1,672,320	1,766,640	5.6%	94,320
Central	525,920	579,295	10.1%	53,375
GTA	4,235,735	4,628,880	9.3%	393,145
Northeast	581,910	582,175	0.0%	265
Northwest	240,550	244,120	1.5%	3,570
Southwest	2,828,340	2,952,465	4.4%	124,125
All Regions	**10,084,775**	**10,753,575**	**6.6%**	**668,800**

Notes:

East: includes the counties of Frontenac, Haliburton, Hastings, Lanark, Leeds and Grenville, Lennox and Addington, Northumberland, Peterborough, Prescott and Russell, Prince Edward, Renfrew, Stormont, Dundas and Glengarry, Victoria, and the Regional Municipality of Ottawa-Carleton.

Central: includes the counties of Bruce, Dufferin, Grey, Simcoe, and the Muskoka District Municipality.

GTA: includes the Regional Municipalities of Durham, Halton, Peel, York and the Toronto Metropolitan Municipality.

Northeast: includes the districts of Algoma, Cochrane, Nipissing, Parry Sound, Sudbury, Timiskaming and the Sudbury Regional Municipality.

Northwest: includes the districts of Kenora, Rainy River and Thunder Bay.

Southwest: includes the counties of Brant, Elgin, Essex, Huron, Kent, Lambton, Middlesex, Oxford, Perth, Wellington and the Regional Municipalities of Haldimand-Norfolk, Hamilton-Wentworth, Niagara, and Waterloo.

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[1] source 1991 and 1996 Population counts from Statistics Canada. Census 1991 and 1996, Special Tabulations

Exhibit 5.2

Ontario Population by Age Group and Region, 1996 [1]

	East	Central	GTA	Northeast	Northwest	Southwest
0 - 14	356,560	127,705	937,990	118,035	54,115	619,805
15 - 19	112,025	37,880	290,275	42,565	17,570	197,710
20 - 24	111,450	31,525	308,920	38,360	16,475	196,745
25 - 44	558,165	176,135	1,594,230	175,010	76,880	915,830
45 - 64	388,550	124,860	988,620	133,700	49,405	622,395
65 +	239,890	81,190	508,845	74,505	29,675	399,980
All Ages	**1,766,640**	**579,295**	**4,628,880**	**582,175**	**244,120**	**2,952,465**

[1] source 1991 and 1996 Population counts from Statistics Canada, Census 1991 and 1996, Special Tabulations

Exhibit 5.3

Ontario Population Change between 1991 and 1996

by Age Group and Region [1]

	East	Central	GTA	Northeast	Northwest	Southwest
0 - 14	6.0%	10.7%	13.3%	-5.9%	-0.1%	4.1%
15 - 19	2.4%	5.9%	5.9%	-6.1%	-1.4%	0.5%
20 - 24	-4.4%	-0.9%	-6.4%	-3.3%	-5.3%	-4.4%
25 - 44	-0.1%	4.8%	5.0%	-4.2%	-2.5%	0.5%
45 - 64	16.0%	21.3%	16.5%	9.4%	10.7%	12.2%
65 +	11.0%	12.8%	16.5%	12.0%	7.1%	9.8%
All Ages	**5.6%**	**10.1%**	**9.3%**	**0.0%**	**1.5%**	**4.4%**

[1] source: Statistics Canada, Census 1991 and 1996, Special Tabulations

Exhibit 5.4

Ontario Population Projections
by Age Group [1]

	2001	2011	2021	% Change 2001 - 2021	# Change 2001 - 2021
0 - 14	2,384,835	2,405,877	2,488,684	4.4%	103,849
15 - 19	783,014	885,235	860,434	9.9%	77,420
20 - 24	769,910	901,537	930,538	20.9%	160,628
25 - 44	3,918,437	3,840,937	4,060,064	3.6%	141,627
45 - 64	2,796,109	3,826,616	4,161,228	48.8%	1,365,119
65 +	1,544,108	1,956,134	2,714,281	75.8%	1,170,173
All Ages	**12,196,413**	**13,816,336**	**15,215,229**	**24.8%**	**3,018,816**

[1] source: Ontario Ministry of Finance, *County Population Projections: 1992 - 2021*, May 1995

Section 6:
Public Policy

1998-99 Environmental Scan

Public Policy

Key Findings

- Expenditures on education are increasingly being seen by government as an investment that is integral to social and economic development.

- Initiatives announced through the 1997 and 1998 Federal budgets are designed to support access to, and the affordability of, postsecondary education. They also signal a growing recognition of the changing pattern of learning that is resulting because of economic and family responsibilities. Examples include:

  - establishing the Millennium Scholarship Fund through a $2.5 billion endowment. Beginning in 2000, scholarships averaging $3,000 a year will be awarded on the basis of both financial need and merit.
  - extending student loans and related education tax and child care credits to part-time students.
  - introducing special opportunity grants for students with dependents.
  - allowing RRSP savings to be used for educational purposes.
  - enhancing the attractiveness of Registered Educational Savings Plans (RESPs) by providing Canada Education Savings Grants for contributions made to these plans.
  - reforming student loan repayment to include a tax credit on interest accrued, extending the interest relief and the repayment period, and providing debt reduction measures for individuals in financial difficulty.

- The Ontario government through its 1998 Budget established the Canada-Ontario Millennium Fund. It will be made up of the province's existing share of the Federal government's Millennium Fund as well as both Federal and Ontario spending on student loans for a total commitment of $9 billion over 10 years. While the province has not committed any additional funds for student financial assistance, this initiative signals its commitment to harmonize programs with the Federal government which will simplify administration.

- The Federal government also appears to be moving towards targetting spending in health, education and social welfare as means of raising its profile and receiving credit. This in turn is adding to conflict with provinces over jurisdictional issues.

- British Columbia is taking an innovative approach to addressing the affordability of postsecondary education. Under *Youth Community Action*, students who participate in community-service activities will receive financial credits toward their tuition.

  - Beginning September 1998, students between the ages of 15 and 24 who serve from 100 to 300 hours of volunteer time with non-profit community organizations and other charitable groups will be eligible for a tuition credit to a maximum of $2,400. The credit will be redeemable at any postsecondary institution in the province.

- The Ontario government's decision to allow a level of deregulation of fees at its colleges and universities is creating a level of conflict with other provinces. British Columbia is calling on the Federal government to introduce national standards for postsecondary education in order to ensure student interprovincial mobility.
  - The main issue centers around B.C.'s decision to extend a freeze in tuition fees for a third year while Ontario has introduced differential tuition fees. B.C. is concerned that the increase in cost differential between the two provinces will see increased numbers of Ontario postsecondary students coming to B.C. It is now considering charging non B.C. students higher tuition.
  - Out of province student attending a postsecondary institution in Quebec will also face additional fees.
  - The extension of deregulated tuition fees in the public higher education sector also presents a growing challenge to the financial underpinnings of a publically supported student assistance program.
    - It also increases the importance for colleges and universities to develop partnerships, articulation agreements, and joint programs as a means of providing more affordable avenues to credentials.

- The colleges' research activities and demonstrated expertise in the areas of applied technology and the diffusion of technology continue to receive increasing political profile and recognition. These activities are projected to become increasingly important given the more direct returns on investment.
  - In June 1998, the Canada Foundation for Innovation announced the creation of a $10 million *College Research Development Fund.*
  - Ontario's Research and Development Fund has included the colleges of applied arts and technology in its listing of applicants eligible to apply to the Fund.

- The Federal government has identified education as one of the pillars of the knowledge economy. In response to this, it is developing an international strategy for promoting educational services, products and learnware. This strategy builds on the international reputation of Canada's educational institutions and presents an opportunity for Ontario colleges, especially considering their activities in over 70 countries and territories around the world.

- Deficit *reduction* is rapidly shifting to deficit *elimination* for both the Federal government and Ontario:
  - the Federal government's 1998 budget is the first balanced Federal budget in 28 years and the government has committed to balanced budgets through to 2001. The budget also includes a $3 billion contingency fund which if not required will be applied to the national debt.
  - at the provincial level, Ontario revealed through its 1998 budget that the 1997-98 budget was $5.2 billion (significantly down from the projected figure of $6.6 billion) and is forecasted to be eliminated by the year 2000-01.

- With the 1998 throne speech and budget, the Ontario government moved into the second half of its mandate. It is focusing its efforts in the areas of job creation and economic growth, health care, education, and community safety as it positions itself for an election in either 1999 or 2000.

Section 7:
Operating Expenses

1998-99 Environmental Scan

Operating Expenses

Key Findings

- While total college expenditures have decreased approximately 10% since 1993-94, salaries and benefits continue to represent approximately two-thirds of college operating expenditures. [a]

- The consolidation of delivery points while maintaining community access to college programming continues to be a priority:

  - Between 1994-95 and 1996-97, the amount spent on premise rentals decreased 36% while telecommunications expenditures increased 18%. [b]

  - Over the same time period, travel expenditures decreased 12% which suggests that colleges are increasing their reliance on telecommunications to maintain communications linkages between campuses and as a means for sharing college information and programming with the broader public.

- A growing concern for colleges are the increasing costs for audit and professional services. Since 1994-95, there has been a 28% increase. This may suggest a correlation with the agenda of the Ministry of Education and Training and the broader government to move forward with a level of deregulation.

- The amount spent on building, site and leasehold improvements declined 58% between 1995-96 and 1996-97 which most likely corresponds with the wrapping up of the Canada-Ontario Infrastructure Works Program, a federal-provincial capital initiative.

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[a] see Exhibits 7.2 and 7.3

[b] see Exhibit 7.1

Exhibit 7.1

Non-Labour Costs Increase [1]

Operating

Type of Costs	Expenditures 1995/96 ($)	Expenditures 1996/97 ($)	% Change
Instructional Supplies	42,165,767	38,955,958	-7.6%
Field Work	2,228,776	1,631,536	-26.8%
Memberships & Dues	1,517,730	1,528,331	0.7%
Staff Employment	712,010	541,742	-23.9%
Professional Development	4,314,817	4,175,829	-3.2%
Travel	15,228,002	13,975,088	-8.2%
Promotion / Public Relations	14,192,732	14,051,856	-1.0%
Maintenance, Supplies & Vehicles	79,039,921	74,344,470	-5.9%
Telecommunications	13,238,621	13,980,502	5.6%
Insurance	4,046,853	4,715,336	16.5%
Audit & Professional Fees	11,393,713	12,726,124	11.7%
Contracting (various)	86,947,948	63,999,254	-26.4%
Electricity, Fossil Fuels, Water, Refuse	30,016,609	29,172,961	-2.8%
Taxes & Bank Charges	15,510,052	15,111,804	-2.6%
Cost of Goods Sold - Anc. Op.	57,103,217	45,772,976	-19.8%
Scholarships, Bursaries, Awards *	1,617,672	2,761,349	70.7%
Miscellaneous	9,842,546	5,666,876	-42.4%
Total Operating Costs:	**389,116,986**	**343,111,992**	**-11.8%**

* *1996-97 figure includes $1,716,574 for student assistance raised through tuition fees.*

[1] source: College Financial Information System (CFIS), Ministry of Education and Training, 1995/96 and 1996/97 reports

Exhibit 7.1 [cont'd]

Non-Labour Costs Increase

Capital

Type of Costs	Expenditures 1995/96 ($)	Expenditures 1996/97 ($)	% Change
Rental - furniture & equipment	10,691,665	10,052,447	-6.0%
Purchase - furniture & equipment	61,674,656	51,883,618	-15.9%
Premise Rental	21,848,552	15,232,285	-30.3%
Building, Site, Leasehold Improvements	29,184,236	12,175,066	-58.3%
Building & Site Purchase	17,155,669	5,411,782	-68.5%
Building Construction	19,350,272	30,695,082	58.6%
Long Term Debt Interest	7,928,598	5,037,254	-36.5%
Total Capital Costs:	**167,833,648**	**130,487,534**	**-22.3%**

Exhibit 7.2

1997 Compensation Costs [1]

Full-time Employees:

Academic Staff	$402,031,577	Full-time salaries
	3,789,517	Coordinators
	2,325,140	Overtime
	3,237,965	Professional development leave
	16,678,146	Termination gratuities
	60,055,777	Mandatory and insured benefits and pensions
	$488,118,122	
Support Staff	$194,571,684	Full-time salaries
	2,129,246	Overtime
	40,502	Professional development leave
	3,111,646	Termination gratuities
	38,414,192	Mandatory and insured benefits and pensions
	$238,267,270	
Administrative Staff	$106,465,686	Full-time salaries
	100,129	Professional development leave
	971,021	Termination gratuities
	16,517,413	Mandatory and insured benefits and pensions
	$124,054,249	

Part-time Employees:

Academic Staff	$22,258,177	Sessional salaries
	18,052,319	Partial load salaries
	42,349,230	Part-time hourly salaries
	5,582,235	Insured benefits and pensions
	$88,241,961	
Support Staff	**$44,662,694**	Salaries

TOTAL COMPENSATION	**$983,344,296**

[1] Source: Ontario Ministry of Education and Training, College Financial Information System 1996-97 Report. As at March 31, 1997

Exhibit 7.3

College System Revenue & Expenditures

1996-97 [1]

Item	Revenue	Expenditures
General Purpose Operating Grant	$604,265,358	
Adult Training: Federal	$56,966,645	
Adult Training: MET/OTAB	$108,839,257	
Adult Training: Other Contracts	$96,522,312	
Tuition Fees	$309,250,463	
Total "Teaching Related" Revenue	**$1,175,844,035**	
Academic Salaries & Benefits (FT & Other)		$591,097,609
% of Teaching Related Revenue		50.27%
Support Salaries & Benefits (FT & Other)*		$266,527,912
% of Teaching Related Revenue		22.67%
Admin. Salaries & Benefits (FT) **		$118,022,390
% of Teaching Related Revenue		10.04%
Specific Purpose Operating Grants	$87,076,275	
Capital Grants	$28,985,636	
Ancillary Income	$124,111,197	
Other Income	$80,035,087	
Total "Infrastructure" Revenue	**$320,208,195**	
Non-Labour Operating Costs		$343,111,992
Non-Labour Capital Costs		$130,487,534
Remaining Support Salaries & Benefits		$21,041,505
Remaining Admin. Salaries & Benefits		$5,968,910
Student Stipends & Allowances		$36,265,556
Totals:	**$1,496,052,230**	**$1,512,523,408**

* calculated as total Support Salaries and Benefits ($287,569,417) less that which was unallocated to the teaching function ($21,041,505)

** calculated as total Admin Salaries and Benefits ($123,991,300) less that which was unallocated to the teaching function ($5,968,910)

[1] source: Ontario Ministry of Education and Training, College Financial Information System Report January 29, 1998

Section 8:
Learners

1998-99 Environmental Scan

Learners

Key Findings

- Overall college enrolment continues to level out although the number of applicants continues to far exceed the number of spaces available. Additionally, there is a large variation in enrolment change by broad program area.

  - Total college enrolment (including CEIC, and International students) grew approximately 1.3%. [a]
  - Business and technology program areas grew above the system average, 4.3% and 3.4% respectively, while programs in the health sciences area dropped 12.8%. Applied arts enrolment grew at approximately the same rate as the overall system average. [b]

- Colleges continue to serve a diverse group of individuals. In 1997, and consistent with 1996 application data, approximately 60% of applicants indicated on their application that they were either previous high school graduates or mature students. The remaining 40% applied directly from secondary school. Further data on Fall 1997 applicants and registrants include:

Fall 1997 (from the Ontario College Application Service)	Applicants	Registrants
Age:		
• 19 and under	31.1%	34.3%
• 20 to 24	44.5%	45.6%
• 25 to 29	10.4%	8.5%
• 30 and over	12.4%	10.2%
• unknown	1.6%	1.4%
Gender:		
• Female	51.7%	51.6%
• Male	48.3%	48.4%
Current Secondary School Student?:		
• Yes	40.2%	44.0%
• No	59.8%	56.0%
Mother Tongue:		
• English	82.3%	83.8%
• French	4.0%	4.2%
• Bilingual	3.6%	3.4%
• Other	10.1%	8.6%

[a] see Exhibit 8.1

[b] see Exhibit 8.2

- In examining the movement of students between colleges and universities, it appears that more university students are applying to college than vice versa. [c]

  - This could be a reflection of the growing need for students to develop both theoretical knowledge and applied skills in order to be successful in the changing economy.

- The proportion of special needs students reporting learning disabilities in 1996-97, 45.5%, continues to present a challenge to colleges in ensuring that adequate support and counselling mechanisms are available to further student success. [d]

- The availability and affordability of financial assistance continues to be a significant consideration for students seeking postsecondary education.

  - Between 1990-91 and 1997-98, while overall college enrolment grew approximately 32%, the number of college students receiving OSAP increased approximately 75%. [e]

  - Over 50% of college students now rely on student loans through OSAP to finance their education. This proportion doesn't include students who obtain loans from private lenders.

See also Section 6: Public Policy

- The diversity of student profiles in each postsecondary sector becomes apparent when the number and proportion of OSAP awards by broad student group are examined:

	Married / Sole Support		Independent		Dependent	
	No.	%	No.	%	No.	%
Colleges of Applied Arts and Technology	15,824	21.5	25,032	34.1	32,502	44.3
Universities	9,018	10.0	32,162	35.6	49,112	54.3
Private Vocational Schools	11,979	51.7	8,407	36.3	2,773	12.0

Source: Student Support Branch, Ministry of Education and Training, as of May 24, 1998

  - The greater proportion of married and sole support students in private vocational schools suggests that the shorter program lengths and flexible delivery schedules are key considerations for this student group, despite the higher tuition fees and related costs.

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[c] see Exhibit 8.3

[d] source: College Committee on Disability Issues, *Special Needs Statistical Report: April 1, 1996 to March 31, 1997*, June 1997

[e] see Exhibit 8.4

- Private vocational schools also had the highest OSAP default rates in 1997 (38.5%) as compared to colleges (27.5%) and universities (13.9%).

- A key objective of the Ministry of Education and Training is to reduce OSAP default rates to under 10% overall in each sector by 2001. As the first step toward meeting this objective, beginning in 1998-99, postsecondary institutions whose 1997 loan default rate was 15 percentage points or more above the provincial average of 23.5% will be required to share the cost of defaults for their high-default programs. In the following year, the policy will extend to default rates that are 10 percentage points or more above the 1997 provincial average.

Exhibit 8.1

Full-time Postsecondary Enrolment
in Ontario Colleges[1]

Year	FTPS Enrolment excluding CEIC, and International Students	FTPS Enrolment including CEIC, and International Students
1976		58,757
1977		61,094
1978		64,793
1979	**not available**	70,508
1980		76,585
1981		81,599
1982		90,692
1983	95,107	97,239
1984	96,855	98,859
1985	94,266	96,269
1986	93,474	95,118
1987	94,911	96,191
1988	94,150	95,051
1989	97,347	98,080
1990	102,998	103,598
1991	113,594	114,398
1992	121,919	122,745
1993	125,238	127,526
1994	129,857	132,071
1995	134,127	135,880
1996	134,409	136,128
1997	135,831	137,862

[1] 1976 - 1994 enrolment figures from Ministry of Education and Training CAAT2 report (November 1 student count)
1995 - 1997 enrolment figures from Ontario College Application Service November 1 survey of colleges

Exhibit 8.2

Trends in Full-time Postsecondary Enrolment at Colleges [1]

Year	Applied Arts		Business		Health Sciences		Technology		TOTAL
	#	% Change	#	% Change	#	% Change	#	% Change	
1986	25,902	--	32,192	--	13,074	--	23,950	--	95,118
1987	28,890	11.5%	33,447	3.9%	13,403	2.5%	20,451	-14.6%	96,191
1988	30,101	4.2%	31,981	-4.4%	13,465	0.5%	19,496	-4.7%	95,043
1989	31,327	4.1%	32,207	0.7%	13,863	3.0%	20,657	6.0%	98,054
1990	33,657	7.4%	33,446	3.8%	14,461	4.3%	21,823	5.6%	103,387
1991	38,526	14.5%	38,081	13.9%	14,336	-0.9%	23,455	7.5%	114,398
1992	41,754	8.4%	40,846	7.3%	14,438	0.7%	25,707	9.6%	122,745
1993	44,728	7.1%	41,515	1.6%	14,546	0.7%	26,467	3.0%	127,256
1994	47,503	6.2%	43,629	5.1%	13,715	-5.7%	27,224	2.9%	132,071
1995	49,989	5.2%	42,932	-1.6%	14,561	6.2%	28,398	4.3%	135,880
1996	47,820	-4.3%	44,675	4.1%	14,386	-1.2%	29,247	3.0%	136,128
1997	48,469	1.4%	46,596	4.3%	12,542	-12.8%	30,255	3.4%	137,862
Total % Change		**87.1%**		**44.7%**		**-4.1%**		**26.3%**	**44.9%**

Note:
Includes CEIC and International Students

[1] Source Ministry of Education and Training

Exhibit 8.3

Movement of College and University Students [1]

In 1997-98, the College-University Consortium Council (CUCC) contracted a study of the movement of students and graduates between colleges and universities. One objective was to determine the level of desire among postsecondary students to move between each sector. On this level, the study found that:

From University to College:

- In 1996, 10,984 applicants to college through the Ontario College Application Service (OCAS), or approximately 7% of a total of 154,615 applicants indicated on their forms that they had attached a university transcript.

  This proportion is most likely understated since:
  - many college programs don't require postsecondary background for admission,
  - not all applicants choose to reveal previous university or other postsecondary study, and
  - the OCAS form doesn't require the applicant to detail previous educational and other activity as the Ontario University Application Centre form does.

- 37% of applicants sought admission to 2-year programs, 27% to 3-year programs, and 24% to a post-diploma program. By program area, the top three choices were Office and Business Administration, Social Services, and Visual and Creative Arts.

- Of these 10,984 applicants, 60% accepted an offer of admission. The proportion of those who enrolled is not available.

From College to University:

- In 1996, 7,374 applicants to university through the Ontario University Application Centre (OUAC), or approximately 7.7% of the total applicants, were identified as having studied at some previous point at an Ontario college.

  This proportion is most likely understated since:
  - the majority, *but not all*, advanced standing applications go through OUAC;
  - most part-time applicants do *not* go through OUAC; and
  - *not* all applicants for degree completion programs under agreements with colleges go through OUAC.

- 83% sought admission to the first year university level (based on first choice) while the remainder sought advanced standing. By program area, the top three choices were General Arts and Science, Business (eg., management, accounting, administration and commerce), and Sciences (eg., general, biological, mathematics, physical, computer).

- Of these 7,374 applicants, 61% accepted an offer of admission; of this proportion 59.5% enrolled.

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[1] source: R.I. Cummins, *Movement between Ontario Universities and Colleges: Report to the College-University Consortium Council*, March 10, 1998

Exhibit 8.4

Ontario Student Assistance Program - College Trends

1. Levels of Student Assistance and Number of Recipients:

Year	Ontario Study Grant (current $)	Canada Student Loan (current $)	Ontario Student Loan (current $)	No. of College OSAP [1] Recipients	Total Full-time Postsecondary Enrolment	% of Total
1990-91	80,838,901	65,510,282	9,558,814	42,145	102,998	41%
1991-92	109,578,596	112,686,222	18,753,774	55,271	113,594	49%
1992-93	125,044,943	123,343,781	20,697,160	59,612	121,919	49%
1993-94	n/a	187,008,735	151,935,794	64,450	125,238	51%
1994-95	n/a	204,453,493	175,897,587	71,595	129,857	55%
1995-96	n/a	234,680,293	197,265,690	73,094	134,127	54%
1996-97 [2]	n/a	270,027,858	250,059,461	72,333	134,414	54%
1997-98 [3]	n/a	277,154,809	255,104,121	73,450	135,831	54%

Notes:

1. Receiving Canada Student Loans and/or Ontario Student Loans. Excludes CEIC, and International Students
2. Updated to reflect report current as of May 2, 1998.
3. As of May 24, 1998.

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[1] source: Ontario Ministry of Education and Training, Student Support Branch

Exhibit 8.4 [cont'd]

Ontario Student Assistance Program
College Trends

2. Number of Awards by Student Group [1]:

Student Group	1993-94	1994-95	1995-96	1996-97 [2]	1997-98 [4]
Dependent at Home	10,381	11,185	11,279	12,069	13,920
Dependent Away	14,971	17,311	16,328	16,627	18,582
Independent	24,838	27,692	29,332	27,971	25,032
Married [3]	6,206	6,763	6,887	7,067	7,191
Sole Support [3]	8,048	8,578	9,226	8,583	8,633
Other	6	31	42	16	92
TOTAL	**64,450**	**71,560**	**73,094**	**72,333**	**73,450**

3. Average Loan Amount by Student Group [1]:

Student Group	1993-94	1994-95	1995-96	1996-97 [2]	1997-98 [4]
Dependent at Home	$3,150	$3,155	$3,220	$3,418	$3,168
Dependent Away	$5,362	$5,388	$5,472	$5,632	$6,203
Independent	$5,940	$5,940	$6,101	$6,358	$6,526
Married [3]	$5,720	$6,072	$5,853	$9,804	$10,813
Sole Support [3]	$5,333	$5,344	$6,062	$14,004	$15,192
Other	$3,943	$5,203	$5,318	$7,967	$7,048

***Notes*:**

1. Receiving Canada Student Loans and/or Ontario Student Loans.
2. Updated to reflect report current as of May 2, 1998.
3. Effective 1996-97, married or sole support students taking a 60% or greater course load at a postsecondary institution are required to apply to OSAP for both education and living costs *instead* of just the education costs (with social assistance providing for living costs).
4. As of May 24, 1998.

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[1] source: Ontario Ministry of Education and Training, Student Support Branch.

Section 9:
Human Resources

1998-99 Environmental Scan

Human Resources

Key Findings

- Employee supports are becoming increasingly important to developing and sustaining a healthy work environment.

  - According to a report on the state of the world's health by the World Health Organization, more working days are lost around the world as a result of mental disorders than physical conditions. The report projects that by 2020, depression (mood and anxiety disorder) will be the leading cause of disability in the developing world. [a]

  - A 1996 survey adds credence to this projection by finding that Canadian workers were almost three times more likely to complain of health problems arising from workplace stress than from workplace illnesses: 25% reported stress, mental or emotional health problems arising from work, compared with 9% reporting workplace injury and a further 9% who said they suffered from work-related physical illness. [b]

- Human resource considerations and support mechanisms are also an important factor in maintaining a competitive advantage and to becoming more market driven.

- As the Ontario population and workforce becomes proportionately older, the need for succession planning is projected to grow in importance for all organizations in an increasingly competitive environment.

- Employee skills and competencies remain a key priority, however a growing challenge will be to measure the effectiveness of training provided; a shift towards outcomes based evaluation that is inherent with demonstrating accountability. [c]

- Increasing confidence in the economy and continuing economic growth are increasing the gap between management and labour over issues of wages and workplace flexibility; a trend occurring at both the national and provincial levels and in both the public and private sectors.

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[a] source: World Health Organization, *1998 World Health Report: Life in the 21Century - A Vision for All*, Spring 1998

[b] source: Canada Health Monitor 1996 Survey as reported in The Globe and Mail, April 8, 1998

[c] see Exhibit 9.3

- Management pressures driven by competitive pressures are increasing the need for greater flexibility in workplace practices. At the same time, as labour organizations continue to push for substantial wage increases to make up for real wage losses over the past decade, there is also acceptance of the need for workplace flexibility in exchange for employment security provisions (e.g., protection against layoffs and guarantees for training for new jobs). [d]

Management	Union
1. Flexible work practices	1. Employment security
2. Technological and/or organizational change	2. Wages
3. Wages	3. Health and pension
4. Health and pension	4. Outsourcing/contracting out
5. Outsourcing/contracting out	5. Technological and/or organizational change

Source: Conference Board of Canada

- Contributions to the Canada Pension Plan will increase in steps over the next six years starting in 1997, from 5.85% to 9.9% of contributory earnings, to be shared equally between employers and employees, and then remain steady. The 1997 rate was adjusted to 6.0% with the difference, to a maximum additional cost of $24, collected through 1997 tax returns.

- Women in the labour force continue to make significant gains to senior management positions and often entrepreneurial capacities. At the same time, however, they continue to be under represented on boards of directors.

  - A York University study of 951 firms found that women accounted for only 6% of board positions. 75% of the firms studied had no female directors.

  - In contrast, a report by a Toronto based consulting firm indicates that there are more than 700,000 women-led businesses in Canada (representing nearly one third of all businesses) providing employment for 1.7 million Canadians. It also indicated that the number of women-led businesses are growing at a rate twice the national average for all businesses and are creating employment at four times the average rate for all businesses. [e]

- The role of, and skills required for, educational leaders is changing as institutions become more entrepreneurial and seek partnerships with industry.

  - A small, but growing, number of American colleges are picking business-school deans as presidents because of their managerial sense and their fund raising skills. Business deans are seen to be in a strong position to cultivate corporate contacts "since they speak the same language" and often have backgrounds similar to those of business leaders. They are also seen as being more effective in "translating the academic environment to the outside world". [f]

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[d] source: Conference Board of Canada, *Industrial Relations Outlook 1998*, Suzanne Payette, January 1998

[e] source: Canadian HR Reporter, April 6, 1998 *and* Bennett Gold: Chartered Accountants, June 8, 1998

[f] source: Chronicle of Higher Education, Section: Money and Management, March 27, 1998

Exhibit 9.1

College Staff [1]

October 1997

Full-time Staff:

	Male	Female	Total
Academic	3,715	2,780	6,495
Support	1,641	3,745	5,386
Administration	639	805	1,444
Total	**5,995**	**7,330**	**13,325**

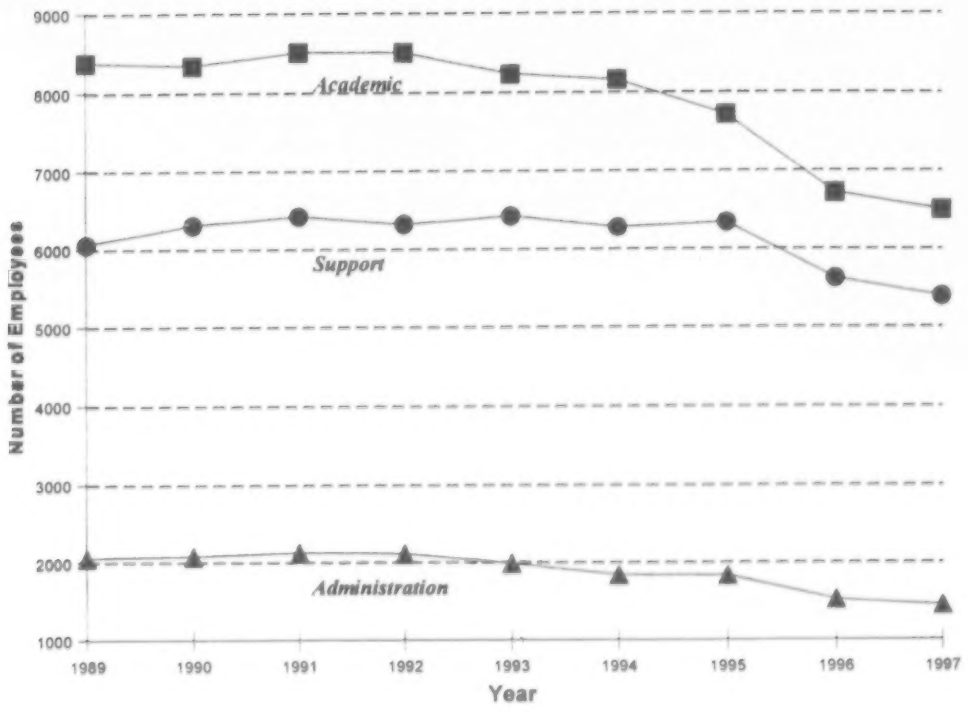
Part-time Staff:

	Male	Female	Total
Academic	4,970	4,515	9,485
Support	982	2,406	3,388
Total	**5,952**	**6,921**	**12,873**

[1] source: Ontario Council of Regents, Human Resources Secretariat, College Surveys

Exhibit 9.2

Full-time Staff in Ontario Colleges 1984 to 1997[a]



[a] source: Ontario Council of Regents, Human Resources Secretariat

Exhibit 9.3

Trends in Human Resource Development[1]

In a 1997 survey of human resource executives, the American Society for Training and Development identified the top 10 trends in human resource development in both the current environment and in the next three years.

The survey results indicate that while skills and competencies remain a key priority, growing in significance is the importance of measuring and evaluating training and learning outcomes as well as demonstrating performance.

Now:

1. Computer skills training
2. Teamwork training
3. Shift from training to performance
4. Decision-making and problem-solving training
5. Rapid development and deployment of training
6. Systems-thinking training
7. Demonstrating training outcomes
8. Measuring performance outcomes
9. Shift from training to learning
10. Making a business case for training interventions

In the next 3 years:

1. Shift from training to performance
2. Computer skills training
3. Shift from training to learning
4. Virtual organizations
5. Demonstrating training outcomes
6. Measuring performance outcomes
7. Delivering training to meet specific needs
8. Emphasis on knowledge management
9. Rapid development and deployment of training
10. Teamwork training

[1] source: American Society for Training and Development, *Training Industry Trends 1997*, November 1997